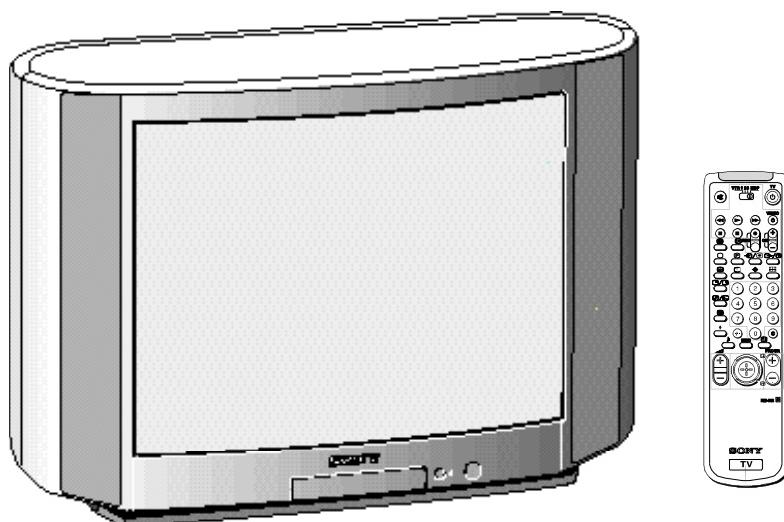


# SERVICE MANUAL

**AE-4 CHASSIS**

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-25C3A	RM-862	Italian	SCC-K43E-A	KV-25C3D	RM-862	AEP	SCC-K41E-A
KV-25C3B	RM-862	French	SCC-K45E-A	KV-25C3E	RM-862	Spanish	SCC-K42E-A



**TRINITRON® COLOR TV**  
**SONY®**

ITEM MODEL	Television System	Channel Coverage	Colour System
Italian	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, SECAM NTSC3.58/4.43 (video input only)
French	B/G/H, D/K, L, I	L SECAM VHF: F2-F10 UHF: F21-F69 TV CABLE TV (1) VHF: B-Q UHF: S21-S44 PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 PAL I UHF: B21-B69 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, SECAM NTSC3.58/4.43 (video input only)
AEP	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, SECAM NTSC3.58/4.43 (video input only)
Spanish	B/G/H, D/K	PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, PSECAM NTSC3.58/4.43 (video input only)

MODEL	25C3A	25C3B	25C3D	25C3E
Power Consumption	107W	124W	124W	124W

## SPECIFICATIONS

## Picture Tube

Super Trinitron  
Approx. 63 cm (25inches)  
(Approx. 59 cm picture measured  
diagonally) 110° deflection

## [FRONT]

- 3 Video input - phono jack
- 3 Audio inputs - phono jacks
- 3 S video input - 4 pin DIN
- Headphones jack: stereo minijack

## Rear/Front Terminals

## [REAR]

- 21-pin Euro connector (CENELEC standard)
- Inputs for audio and video signals
- Inputs for RGB
- Outputs of TV video and audio signals
- 2/ → 2 21-pin Euro connector
- Inputs for audio and video signals
- Inputs for S video
- Outputs for audio and video signals (selectable)

- |                      |   |
|----------------------|---|
| Sound output         | 2x30W (music power), 2x15W (RMS)                                    |
| Dimensions           | 717x507x480 mm approx.  |
| Weight               | Approx. 33.0 kg   |
| Supplied accessories | Remote Commander RM-862 (1)<br>Batteries R6 (2)<br>Aerial cable (1) |
| Other features       | FASTEXT, 100Hz Digital Plus, PIP,<br>NICAM stereo (KV-25C3B only)   |

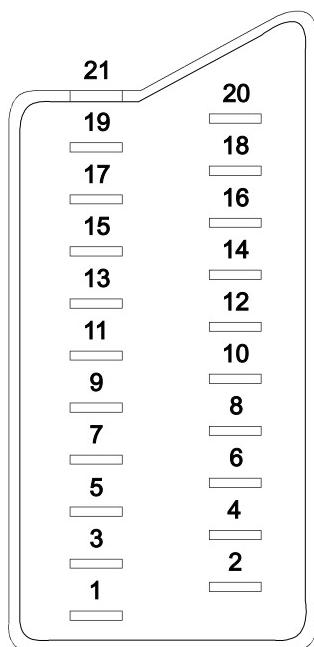
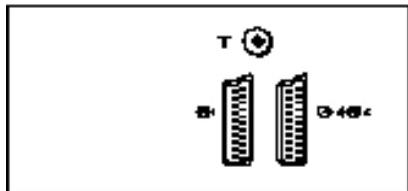
**[RM-862]**

Remote control system    Infrared control  
 Power requirements    3V dc (2 batteries) R6 (size AA)  
 Dimensions            Approx. 210x56x24 mm (w/h/d)  
 Weight                Approx. 110g  
                       (Not including battery)

**Design and specifications are subject to change without notice.**

Item \ Model name	KV-25C3A	KV-25C3B	KV-25C3D	KV-25C3E
PIP	OFF	OFF	OFF	OFF
MPIP	ON	ON	ON	ON
Rotation Coil	OFF	OFF	OFF	OFF
VM Set (Velocity Modulation)	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON
AKB in 16:9 mode	ON	ON	ON	ON
TXT	ON	ON	ON	ON
FLOF	ON	ON	ON	ON
TOP	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON
Norm I	OFF	ON	OFF	OFF
Norm D/K	OFF	ON	ON	ON
Norm L	OFF	ON	OFF	OFF
Language Preset	Italian	French	German	Spanish

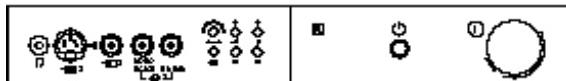
## 21 pin connector (G1, Y2/ j 2)



Pin No.	1	2	4	Signal	Signal Level
1	○	○	○	Audio output B (Right)	Standard level : 0.5V rms Output impedance : Less than 1k ohms*
2	○	○	○	Audio input B (Right)	Standard level : 0.5V rms Output impedance : More than 10k ohms*
3	○	○	○	Audio output A (Left)	Standard level : 0.5V rms Output impedance : Less than 1k ohm*
4	○	○	○	Ground (Audio)	
5	○	○	○	Ground (Blue)	
6	○	○	○	Audio input A (Left)	Standard level : 0.5V rms Output impedance : Less than 10k ohm*
7	○	●	●	Blue input	0.7 ± 3dB, 75 ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More than 10k ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (Green)	
10	○	○	○	Open	
11	○	●	●	Green	
12	○	○	○	Open	
13	○	○	○	Ground (Red)	
14	○	○	○	Ground (Blanking)	
15	○	—	—	Red input	0.7 ± 3dB, 75 ohms, positive
	—	○	○	(S signal) chroma input	0.7 ± 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75 ohms
17	○	○	○	Ground (Video output)	
18	○	○	○	Ground (Video input)	
19	○	○	○	Video output	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
20	○	—	—	Video input	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
	—	○	○	Video input Y (S signal)	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected    ● Not Connected (Open)    \* at 20Hz - 20kHz

Pin No.	Signal	Signal Level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75 ohm, positive Sync. 0.3V -3 + 10dB
4	C (S signal) input	0.3V ± 3dB 75ohm, positive Sync.



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### CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

### ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

### WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

### ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ÊTRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDE À L'ALIMENTATION SECTEUR.

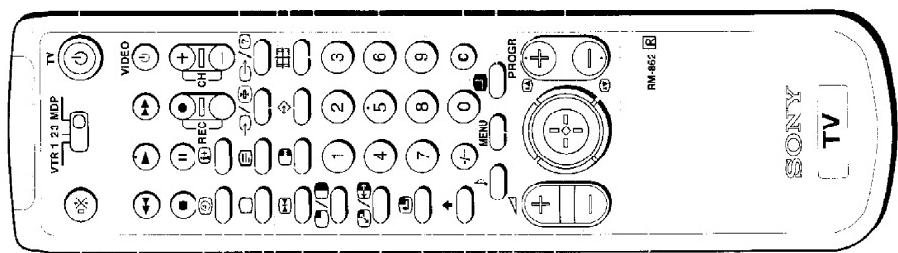
### ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE SUR LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDICUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

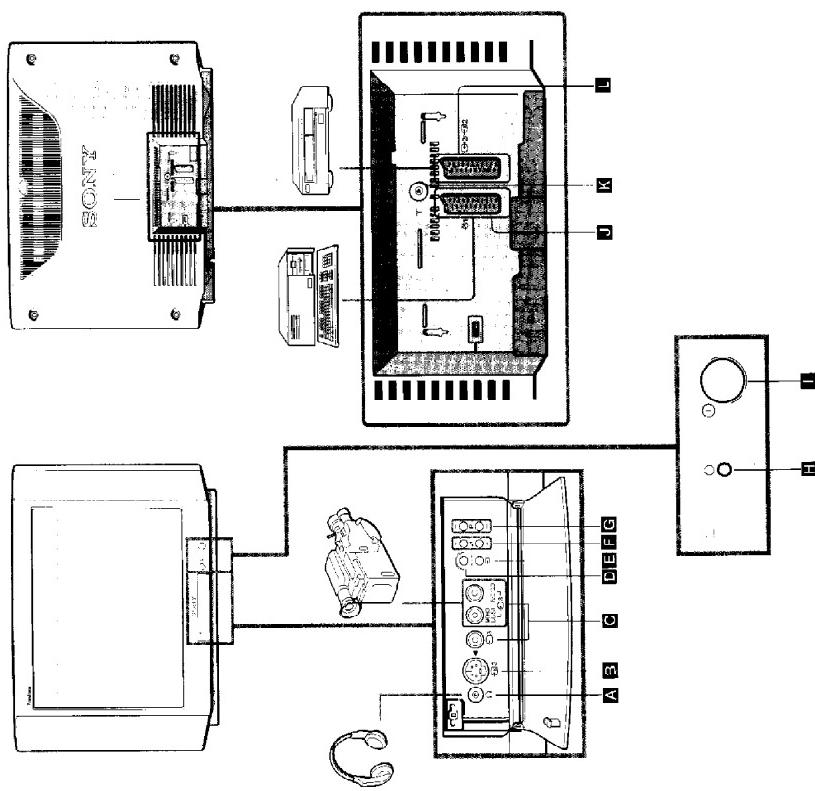
## SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

18 19 20 21 22 23 24 25 26



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

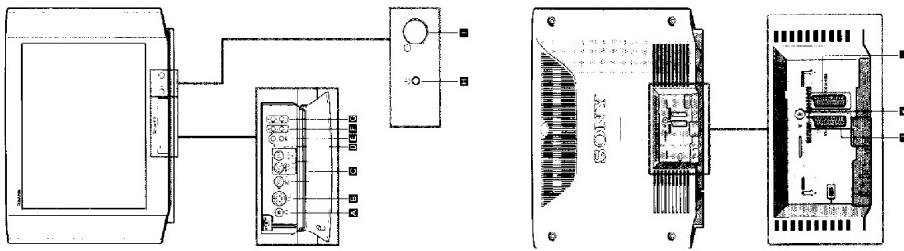


## Overview

This section briefly describes the buttons and controls for the TV set and on the Remote Commander. Please open the flap at the front and at the back of the Instruction Manual for detailed illustrations of the Remote Commander and the TV set. Letters in boxes refer to the buttons and connectors on the TV set; numbers in circles refer to the buttons on the Remote Commander. For more information, refer to the pages given next to each description.

### TV set – front

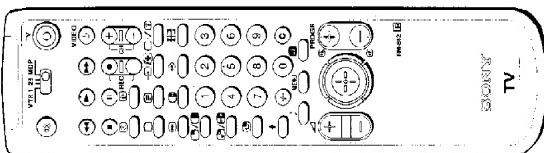
Reference and Symbol	Name	Refer to page
A	Headphones jack	35
B	Video input jack	40
C	Input jacks (video, audio)	40
D	Reset button	28
E	Input mode button	28
F	Volume control	28
G	Programme buttons	28
H	Standby mode indicator	28
I	Main power switch	28



### TV set – rear

Reference and Symbol	Name	Refer to page
J	2-pin Euro connector	40
K	Aerial socket	26
L	2-pin Euro connector	40

## Remote Commander



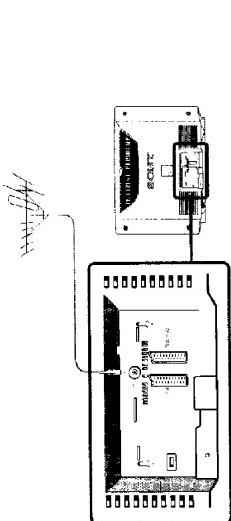
Reference and Symbol	Name	Refer to page
①	Muting on/off button	28
②	VCR operation	41
③	VIDEO ⑤, CH +/-	41
④	On-screen display button	28
⑤	Time display button	28
⑥	Teletext button	28, 37
⑦	TV power on/TV mode button	28
⑧	No function on this set	28
⑨	Freeze button	28
⑩	PIP on/off button	36
⑪	PIP Swap button	36
⑫	PIP position button	36
⑬	PIP source selector	36
⑭	Double digit entering button	28
⑮	Sound mode button	34
⑯	Menu on/off button	29
⑰	Volume control buttons	28
⑱	Joystick for Menu selection	29
⑲	Press to confirm selection (OK function)	28
⑳	TV stand-by button	28
㉑	Output mode selector	40
㉒	Teletext: Reveal button	37
㉓	Input mode selector	28
㉔	Teletext: Freezing the subpage	37
㉕	Teletext: Favourite pages button	39
㉖	No function on this set	28
㉗	Number buttons	28
㉘	Direct channel entering button	28
㉙	Picture mode button	34
㉚	Programme buttons	28
㉛	Teletext: Page up/page down buttons	37

## Basic Operation

### Step 1 Installation

**A Connecting the Aerial**  
If you connect a VCR, skip to step b)

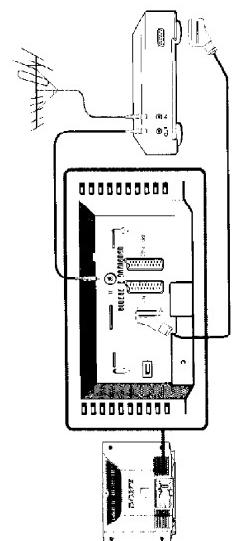
Insert the aerial plug of the supplied aerial cable tightly into the aerial socket **K**.



### B Connecting a VCR

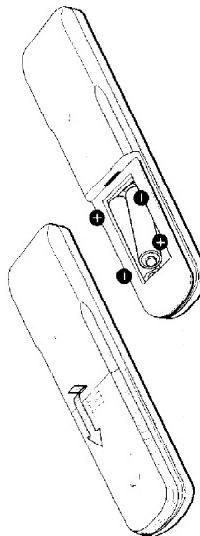
We recommend that you tune in the VCR signal to the programme position **0**.

Use the preset function »Manual Programme Preset« (page 29) to do this.



### C Inserting the batteries into the Remote Commander

Insert the batteries checking the correct polarities.



! Respect your environment! Dispose of used batteries in an environmental friendly way.

### Step 2 Basic Presetting

#### A Choosing the Menu Language and the Country

Using this function you select the language of the menu screens. Also you select the country in which you will use the TV. In this way the channels of the selected country will automatically get the top positions during automatic presetting.

1. Press the power switch **①** or a number button **②** on the TV. If the standby indicator **H** on the TV is lit, press **□** or a number button **②** on the Remote Commander. Press the MENU button **③** on the Remote Commander. The menu LANGUAG/E appears.

2. Push the joystick **④** to blue or green to select the language. Press the joystick **⑤** to confirm your selection. The menu COUNTRY appears.

3. Push the joystick **④** to blue or green to select the country in which you wish to operate the TV. Press the joystick **⑤** to confirm the selection.

4. Press MENU **③** to restore the normal TV picture.

#### B Presetting Channels Automatically

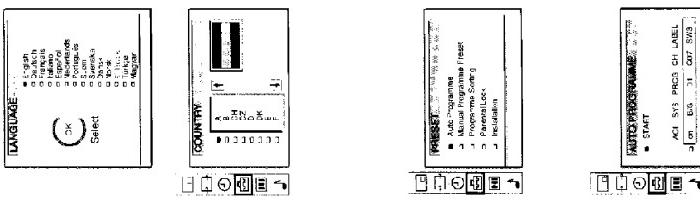
With this function the TV automatically searches and stores up to 100 channels onto Programme positions. If you prefer »Manual Presetting« of channels, please refer to Page 29 in Advanced Operation.

1. Press MENU **③**.  
2. Push the joystick **④** to blue or green to select the symbol **E** on the menu screen, then push yellow.

3. Push the joystick **④** to blue or green to select »Auto Programme«, then push yellow. The menu AUTO PROGRAMME appears.

4. a) All items shown on the menu screen are as wanted. Press joystick **⑤** to select START. Now the automatic channel Presetting starts from Programme position 1.  
or  
b) You wish to change items as shown on the menu screen. Push the joystick **⑤** to blue or green, push yellow repeatedly until the desired item is highlighted.

Push the joystick **④** to blue or green to select the following possibilities:  
**ACI**  
(Automatic Channel Installation, depending on availability of service in your country)  
on, fast channel Presetting by special networks using the channel frequency (e.g. RDS)  
off, ACI is not active, only ITF (Intelligent Tuner Preset)  
**SYS** (TV Broadcast System)  
B/G for Western European Countries  
D/K for Eastern European Countries  
**PROG** (Programme Position)  
Presetting automatically starts from position 1.  
**CH (channel):**  
C to start presetting with terrestrial channels  
S to start presetting with cable channels  
Press the joystick **⑤** as soon as the automatic presetting should start.  
5 After presetting the normal TV picture reappears.



### Step 3 TV operation

## Using Direct Access Buttons

This section explains functions used while watching TV. Most operations are carried out using the Remote Commander (numbers in circles). All basic functions are also available on the TV set itself (letters in boxes).

Press	To	Press
	Switch on	• <b>① ■</b> on TV.
	Switch off temporarily (Standby mode)	• <b>① ■</b> TV is now in standby mode and indicator <b>E</b> lights up.
	Switch on from standby mode	• <b>② ○</b> PROGR + / - <b>② G</b> or <b>③ ○</b> PROGR + / - <b>② G</b> TV is now in standby mode and indicator <b>E</b> lights up.
	Switch off completely	• <b>① ■</b> on TV. To save energy, we recommend to switch off your TV completely when TV is not in use.
	Select programmes	• <b>② ○</b> PROGR + / - <b>② G</b> or number buttons <b>③</b> For double digit number, press <b>-</b> <b>② ○</b> , then the two number buttons <b>③</b> . Eg. for 24, Press <b>-</b> <b>② ○</b> , then 2 and 4.
	Display a programme table	• The joystick <b>⑦</b> . Push the joystick <b>⑦</b> to blue or green to select a programme, then press the joystick <b>⑦</b> to confirm.
	Display on screen indications	• <b>② ○</b> <b>③</b> . Press again to make the indications disappear.
	Adjust the volume	• <b>④ ← →</b> or <b>② G</b> .
	Mute the sound	• <b>② G</b> . Press again to restore the sound.
	Display the time (only available when reselect is broadcast)	• <b>② ○</b> <b>③</b> . Press again to make the display disappear.
	Time in a channel temporarily	• <b>④ ← →</b> once for terrestrial channels, twice for cable channels. The indicator <b>&gt;C</b> or <b>&gt;S</b> for cable channels appears. Enter the channel number with two digits, e.g. for 4, press 0, then 4.
	View the input of a connected device (see also page 40)	• <b>⑤ ← → E</b> repeatedly until the desired input signal appears. Press <b>□</b> to restore the normal TV picture.
	View teletext (see also page 37)	• <b>⑥ E</b> to switch on. Input a page number using the number buttons <b>③</b> (e.g. for page 125, press <b>1</b> , <b>2</b> and <b>5</b> ). <b>② G</b> to switch off.
	Freeze the picture	• <b>④ ← → D</b> .

Advanced Operation

## Using the Menu System

**Use the following buttons on the Remote Commander to operate the Menu system:**

- | Press | To   | What happens  |
|-------|--|---|
| ■     | Switch on  | • ① ■ on TV.<br>• ② ■. TV is now in standby mode.   |
| ■     | Switch off temporarily (Standby mode)                        | • ③ ■ lights up.  |
| ■     | Switch on from standby mode                                  | • ④ ■ PROGR +/- ⑤ G or any number button ⑥.   |
| ■     | Switch off completely  | • ⑦ ■ on TV.<br>! To save energy, we recommend to switch off your TV completely when TV is not in use.  |
| ■     | Select programmes  | • ⑧ ■ PROGR +/- ⑨ G or number buttons ⑩.<br>For double digit numbers, press -/- ⑪, then the two number buttons ⑫. E.g. for 24, press -/- ⑪ then 2 and 4                                 |
| ■     | Display 2 programme table                                    | • The joystick ⑬. Push the joystick ⑬ to blue or green to select a programme, then press the joystick ⑬ to confirm.   |
| ■     | Display on screen indications                                | • ⑭ ■ Press again to make the indications disappear.<br>• ⑮ ■ + on - ⑯ E.<br>• ⑰ ■ Press again to restore the sound.<br>• ⑱ ■ Press again to make the display disappear.                |
| ■     | Adjust the volume  | • C- once for terrestrial channels, twice for cable channels. The indicator C- or S- for cable channels appears. Enter the channel number with two digits, e.g. for 4, press 0, then 4. |
| ■     | Mute the sound   | • D- ⑲ E repeatedly until the desired input signal appears. Press ⑳ to restore the normal TV picture.   |
| ■     | Display the time (only available when teletext is broadcast) | • E- ⑳ E to switch on.<br>Input a page number, using the number buttons ⑳ (e.g. for page 12, press 1, and 5).<br>⑳ to switch off.   |
| ■     | View the input of a connected device (see also page 40)      | • ⑳ ⑳ ⑳ Press again to restore the normal TV picture.   |
| ■     | View teletext (see also page 37)                             | • ⑳ ⑳ ⑳   |
| ■     | Freeze the picture   | • ⑳ ⑳ ⑳   |

## AqN Inception Operation

## Using the Menu System

**Use the following buttons on the Remote Commander to operate the Menu system:**

- GREEN : scroll up**

**RED : decrease/back to last item or to last menu**  
When menu is not displayed:  
Push red to display the last menu screen

**YELLOW : increase/forward to next item**

**BLUE : scroll down**

**joystick: Press at its neutral position to confirm selection or store**

**Press MENU ⑤**

**Using this function you can preset channels one by one to different programme positions. It is also convenient to allocate programme numbers to video input sources.**

**1 Press MENU ⑤**

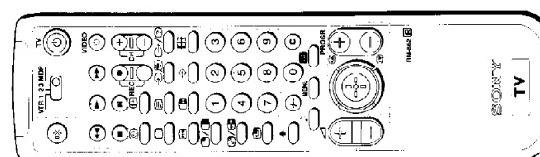
**2 Push joystick ④ to blue or green to select the symbol ② on the menu screen.**  
Push to yellow to confirm the selection.

**3 Push to blue or green to select »Manual Programme Preset«. Push to yellow to confirm the selection.**

**4 Push to blue or green to select the programme position (PROG) to which you want to preset a channel. Push to yellow to confirm.**

**5 Push to blue or green to select the TV broadcast system (SYS) (B/G for western European countries, D/K for eastern European countries) or a video input source (EXT). Push to yellow to confirm.**

**6 Push to blue or green to select <C- (for terrestrial channels), >S- (for cable channels) or <? ->? - (for channel frequency). Push to yellow to confirm.**



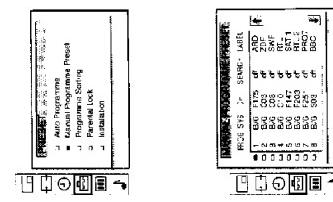
Advanced Presetting

Presetting Channels Manually

Using this function you can preset channels one by one to different programme positions. This makes it convenient to allocate programme numbers to video input

- sources.

  - 1 Press MENU (8).
  - 2 Push joystick  to blue or green to select the symbol  on the menu screen. Push to yellow to confirm the selection.
  - 3 Push to blue or green to select »Manual Programme Presets. Push to yellow to confirm the selection.
  - 4 Push to blue or green to select the Programme position (PROG) to which you want to preset a channel. Push to yellow to confirm.
  - 5 Push to blue or green to select the TV broadcast system (SYS) (B/G for western European countries, D/K for eastern European countries) or a video input source (EXT.). Push to yellow to confirm.
  - 6 Push to blue or green to select <C> (for terrestrial channels), >> (for cable channel or << (for channel frequency). Push to yellow to confirm.



**There are two possibilities to preset channels manually:**

- a) You know the channel number or channel frequency.

## Advanced Presetting

### Advanced Presetting

#### 7a) Direct Input

For channel numbers you need to input a two digit number for the frequency a three digit number.

- Push to blue or green to select the first digit of the channel number or frequency. Push to yellow to confirm.
- Push to blue or green to select the second digit of the number or frequency. Push to yellow to confirm. In case of the channel number the search starts.
- Push to blue or green to select the third digit of the frequency number. Push to yellow to start the search of the frequency.
- To continue search for another channel. Push to blue or green.
- To store the selected channel. Press the joystick **①**.
- Repeat steps 4 to 7a) to preset other channels.

#### 7b) Search

- Push repeatedly to yellow until a blue and a green arrow appear in the section SEARCH.
- Push to blue or green to search for the next available channel.
- To continue search for another channel. Push to blue or green.
- To store the selected channel. Press the joystick **①**.
- Repeat steps 4 to 7b) to preset other channels.

## Captioning a Station Name

Channels are usually automatically labelled during presetting. You can, however, individually name a channel or a video source using up to five characters.

- 1 Press MENU **①**.
- 2 Push joystick **②** to blue or green to select the symbol **■** on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select the programme position with the channel you want to label. Push to yellow repeatedly until the first element of the position LABEL is highlighted.
- 4 Push to blue or green to select the programme position with the channel you want to label. Push to yellow to confirm. Push to yellow to confirm.
- 5 Push to blue or green to select a letter or a number (select **---** for a blank). Push to yellow to confirm. Select the other four characters in the same way.
- 6 After selecting all characters, press the joystick **①**.
- 7 Repeat steps 4 to 6 to label other channels or video sources.
- 8 Press MENU **①** to restore the normal TV picture.

## Using Parental Lock

This function enables you to prevent children watching undesirable broadcasts.

- 1 Press MENU **①**.
  - 2 Push joystick **②** to blue or green to select the symbol **■** on the menu screen. Push to yellow to confirm.
  - 3 Push to green or blue to select **Parental Lock**. Push to yellow to confirm.
  - 4 Push to green or blue to select the channel you want to block. Press the joystick **①** to confirm. The symbol **■** appears before the programme position to indicate that this channel is now blocked.
  - 5 Repeat step 4 to block other channels.
  - 6 Press MENU **①** to restore the normal TV picture.
- ! To unblock:** Select the channel to unblock in the menu „Parental Lock“. Press the joystick **①**. The symbol **■** disappears.

### Storing Programme Positions

This function enables you to skip unused programme positions when selecting them with the PHOCR **-/+** buttons. However, by using the number buttons you can still select the skipped programme position.

#### Joystick



1 Press MENU **①**.

- 2 Push joystick **②** to blue or green to select the symbol **■** on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select **»Manual Programme Preset«**. Push to yellow to confirm.
- 4 Push to blue or green to select the programme position you want to skip. Push to yellow to confirm.
- 5 Push to blue or green to select **»...«** in the position SYSTEM. Press the joystick **①** to confirm.
- 6 Repeat steps 4 and 5 to skip other programme positions.
- 7 Press MENU **①** to restore the normal TV picture.

## Sorting Programme Positions

This function enables you to sort the programme positions to a preferable order.

#### Joystick



1 Press MENU **①**.

- 2 Push joystick **②** to blue or green to select the symbol **■** on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select **»Programme Sorting«**. Push to yellow to confirm.
- 4 Push to blue or green to select the programme position of the channel you want to exchange. Press joystick **①** to confirm.
- 5 Push to blue or green to select the programme position of the second channel. Press joystick **①** to confirm. Now the two programme positions are swapped and sorted.
- 6 Repeat steps 4 and 5 to sort other programme positions.
- 7 Press MENU **①** to restore the normal TV picture.

## Using Parental Lock

This function enables you to prevent children watching undesirable broadcasts.

#### Joystick



1 Press MENU **①**.

- 2 Push joystick **②** to blue or green to select the symbol **■** on the menu screen. Push to yellow to confirm.
  - 3 Push to green or blue to select **Parental Lock**. Push to yellow to confirm.
  - 4 Push to green or blue to select the channel you want to block. Press the joystick **①** to confirm. The symbol **■** appears before the programme position to indicate that this channel is now blocked.
  - 5 Repeat step 4 to block other channels.
  - 6 Press MENU **①** to restore the normal TV picture.
- ! To unblock:** Select the channel to unblock in the menu „Parental Lock“. Press the joystick **①**. The symbol **■** disappears.

## Advanced Presetting

### Using Further Programme Presetts

Using the menu «Further Programme Presetts» you can:

- a) individually adjust and store the volume level of each channel (Volume offset).
- b) in case of picture distortions use manual fine tuning to obtain a better picture quality. The factory setting is «a» for AFT (Automatic Fine Tuning).

- 1 Press MENU 
- 2 Push joystick  to blue or green to select the symbol  on the menu screen.
- 3 Push to blue or green to select «Installation». Push to yellow to confirm.
- 4 Push to blue or green to select «Picture Rotation». Push to yellow to confirm.
- 5 Push to yellow. Push to blue or green to adjust the picture rotation. The adjusting range is -4 to +4. Press the joystick  to confirm.
- 6 Press MENU  to restore the normal TV picture.



6a) VOL Push to blue or green to adjust the volume for the selected programme position within a range of -7 to +7. Press the joystick  to confirm. Repeat step 6 to set the volume level for other programme positions.

- b) AFT Push to blue or green to fine-tune the channel within a range of -15 to +15. Press the joystick  to confirm. Repeat step 6 to fine-tune other channels.
- 7 Press MENU  to restore the normal TV picture.

## Advanced Presetting

### Adjusting The Picture Rotation



If, due to earth magnetism, the picture shifts, you can use this function to readjust the picture.

- 1 Press MENU 
- 2 Push joystick  to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select «Installation». Push to yellow to confirm.
- 4 Push to blue or green to select «Picture Rotation». Push to yellow to confirm.
- 5 Push to yellow. Push to blue or green to adjust the picture rotation. The adjusting range is -4 to +4. Press the joystick  to confirm.
- 6 Press MENU  to restore the normal TV picture.



## Using DAV Presetts

Using this function you can preset the desired input source (e.g.  1, RGB signal) to the respective AV input (AV 1). In this way a connected VCR switches automatically to the RGB signal. Also you can label the input sources.

- 1 Press MENU 
- 2 Push joystick  to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select «AV Presetts». Push to yellow to confirm.
- 4 Push to blue or green to select the desired AV input. Push to yellow to confirm.
- 5 Push to blue or green to select the desired source. Push to yellow to confirm. For the respective AV inputs you have the following choice:  
AV1:RGB or AV  
AV2:Y/C2 or AV  
AV3:Y/C3 or AV
- 6 To label a source: Push to blue or green to select the first character (letter or number,  for a blank). Push to yellow to confirm. Select the other four characters in the same way.
- 7 Press the joystick  to store.
- 8 Repeat steps 4 to 7 for the other AV inputs.
- 9 For RGB input source only: Push to blue or green to select RGB H Centre.
  - Push to yellow to confirm.
  - Push to blue or green to adjust the centre of the picture in a range of -5 to +5.
  - Press the joystick  to store.
- 10 Press MENU  to restore the normal TV picture.

## Advanced TV operation

### Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste.

1 Press **●** or **▲** (for Picture) or **↓** or **●** (for Sound)

Press MENU **④**.

Push joystick **①** to blue or green to select **■** for Picture Control or **↓** for Sound Control. Push to yellow to confirm. The menu PICTURE CONTROL or SOUND CONTROL appears.

2 Push to blue or green to select the desired item. Push to yellow to confirm. For the effect of each control, see the following tables.

3 Push to red or yellow to adjust the selected item. Press the joystick **①** to confirm.

4 Repeat steps 2 and 3 to adjust other items.

5 Press MENU **④** to restore the normal TV picture.

#### Picture Control

Item Effect

Picture Mode Personal → Economy (energy saving setting) →

Live → Sports → Movie → Game

• Less —|—— More

Contrast Darker —|—— Brighter

• Less —|—— More

Brightness\* Colour\* Hue\*\*

• Greenish —|—— Reddish

• Softer —|—— Sharper

Reset Rest

Luminos.

On: Automatic optimization of picture level according to the surrounding lighting level

Screen Mode • Auto: automatic selection of 16:9 broadcasts decoded in 4:3; → 4:3 → 16:9

• Off: Normal

Noise Reduction On: Reduction of picture noise in case of weak signals

\* Only if "Screen" is selected in "Sound Mode".

\*\* Only if "Personal" or "Economy" is selected in "Picture Mode".

\*\*\* Available for NTSC colour system only.

### Advanced TV operation

#### Sound Control

##### Joystick



Item	Effect
Sound Mode	<ul style="list-style-type: none"> <li>Choice between different sound effects</li> <li>User → Pop → Jazz → Rock</li> </ul>
Treble*	<ul style="list-style-type: none"> <li>Less — —— More</li> <li>Less — —— More</li> </ul>
Bass*	<ul style="list-style-type: none"> <li>More left — —— More right</li> <li>Off: normal Ch: for music broadcasts</li> </ul>
Balance	<ul style="list-style-type: none"> <li>Off: normal On: special acoustic effect</li> </ul>
Loudness*	<ul style="list-style-type: none"> <li>Off: normal Ch: for music broadcasts</li> </ul>
Space	<ul style="list-style-type: none"> <li>A: channel 1 or B: channel 2 → Stereo → Mono</li> </ul>
Dual Sound	<ul style="list-style-type: none"> <li>A: channel 1 or B: channel 2 → PIP: if PIP is switched on, you can select the PIP sound for the headphones</li> <li>→ Stereo → Mono</li> </ul>
Headphones	<ul style="list-style-type: none"> <li>Less — —— More</li> </ul>
Volume	<ul style="list-style-type: none"> <li>Less — —— More</li> </ul>
Dual Sound	<ul style="list-style-type: none"> <li>A: channel 1 or B: channel 2 → PIP: if PIP is switched on, you can select the PIP sound for the headphones</li> <li>→ Stereo → Mono</li> </ul>

\* Only if "Screen" is selected in "Sound Mode".

\*\* Only if "Personal" or "Economy" is selected in "Picture Mode".

\*\*\* Available for NTSC colour system only.

#### Using the Sleep Timer

This function enables you to select a time period after which the TV automatically switches into standby mode.

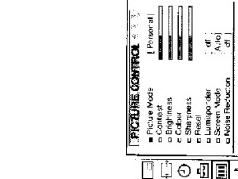
1 Press MENU **④**.

2 Push joystick **①** to blue or green to select the symbol **②** on the menu screen. Push to yellow to confirm.

3 Push to yellow. Push to blue or green to select the time. Off → 10 min → 20 min ..... 80 min → 90 min. Press the joystick **①** to confirm.

4 Press MENU **④** to restore the normal TV picture.

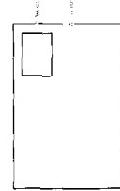
! One minute before the TV switches into standby mode, a message is displayed on the screen.



## Advanced TV operation

### PIP (Picture-in-Picture)

With this function you can display a >PIP screen< (small picture) within the main TV picture. In this way you can watch or monitor the video output from any connected equipment (for example from a VTR) while watching TV or, vice versa.



#### Switching PIP on and off

Press **PIP**. The PIP screen will be displayed. The PIP picture comes from the source chosen when the TV was last used.

To switch PIP off

Press **PIP** again.

or

1. Press MENU **⑤**.  
2. Push joystick **②** to blue or green to select the symbol **□** on the menu screen.  
3. Push to yellow. Push to blue or green to select "On" or "Off".

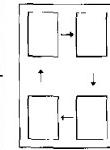
Push joystick **②** to confirm.

4. To change the PIP Position:

Push to blue or green to select "PIP Position". Push to yellow. Push to blue, green, red or yellow to select one of the four positions. Press joystick **②** to confirm.  
5. Press MENU **⑤** to restore the normal TV picture.

#### Changing the position of the PIP

Press **PIP** repeatedly to change the position of the PIP screen within the main screen. There are four different positions available.



#### Selecting a PIP source

Press **PIP**. The symbol **①** will be displayed at the bottom left-hand corner of the screen. Press **PIP** repeatedly until the desired source is selected (e.g. TV, AV1, AV2, YC2, AV3, YC3, AV4, YC4).

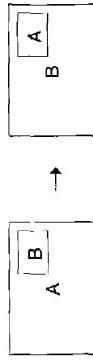
#### Tips

- If no video source has been connected, the PIP picture will be noisy.
- A RGB input source cannot be displayed in PIP.

#### Swapping screens

Press **PIP**.

The main screen will switch the picture with the PIP screen.



- ! If the PIP screen shows a TV programme and the main picture a video source and you want to change channels first press **PIP** and then the programme buttons **①** or PROGR + / - **③**.

## Teletext

Most TV channels broadcast information via teletext. The index page of the broadcaster (usually page 10) informs you about how to use the service. Make sure to use a TV channel with a strong signal, otherwise Teletext errors may occur.

### Direct Access Function

#### Switching Teletext on and off

1. Select the TV channel which carries the teletext service you want to view.  
2. Press **PIP** once to switch Teletext on.  
Press **PIP** twice for Mix mode. The normal TV screen and the Teletext screen are overlapped.  
3. Press **PIP** to switch Teletext off.



#### Selecting a Teletext page

##### Direct Page Selection

Use the number buttons **②** to input three digits of the page number.  
If you have made a mistake, type in any three digits, then reenter the correct page number.

##### Page Catching

1. Select a teletext page with page numbers (e.g. index page).  
2. Press the joystick **②**. Page Catching is displayed at the top of the page.  
Push joystick **②** to blue or green to select the page you want. Press the joystick **②**.  
The requested page is displayed after some seconds.  
Press **PIP** to resume normal teletext reception.

#### Accessing the next or preceding page

##### Press **PIP** (Page +) or **PIP** (Page -)

#### Freezing a teletext subpage

Press **PIP**. The symbol **□** is displayed.  
Press **PIP** to resume normal teletext reception.

#### Revealing hidden information (e.g. for a quiz)

Press **PIP** again to cancel.

#### Using Fastext

(only available, if the TV station broadcasts Fastext signals)

With Fastext you can access pages with one key stroke. When Fastext is broadcast, a colour-coded menu appears at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue marks on the Remote Commander:  
Push the joystick **②** to the colour mark which corresponds to the colour-coded menu. The page is displayed after some seconds.

**continued** >>>>>>

**Teletext**

## Using the Teletext Menu

Your TV is provided with a menu-guided teletext system. When teletext is switched on, you can use the buttons for menu operation to operate the teletext menu.

Select the teletext menu functions as follows:

- 1 Press MENU  The menu is superimposed on the teletext display.
- 2 Push the joystick  or green to select the teletext function you want.
- 3 Push to yellow to confirm the selection.

See page 59 for information about presetting and operating the user pages.

**USER PAGES/PRESET USER PAGES**

The index gives you an overview of the contents of the teletext you are using.

**INDEX**

The index gives you an overview of the contents of the teletext you are using.

**TOP/BOTTOM/FULL**

For convenient reading of a teletext page you can enlarge the teletext page. After selecting the function, an information line »« is displayed at the top of the bottom half. Push the joystick  to green to enlarge the upper half; push to blue to enlarge the lower half. Press the joystick  to resume the normal display. Press  to resume normal teletext reception.

**TEXT CLEAR**

After selecting the function, you can watch a TV programme while waiting for a requested teletext page to be captured. When the page is available, the symbol  changes colour. Press  to view the requested page.

**SUBTITLES**

Check with your teletext service for information about subtitled TV programmes. After selecting the function the subtitles are displayed.

**TIME PAGE**

Check with your teletext service about the availability of time coded pages. If available, you can call up a page (e.g. an alarm page) at a certain time.

- 1 Select TIME PAGE in the teletext menu.
- 2 Push joystick  to yellow. An information window is displayed. Push to blue or green to select . Push to yellow.
- 3 Use the number buttons  to enter the three digits of the page you want (e.g. 301).
- 4 Use the number buttons  to enter the four digits of the desired time (e.g. 3454). Push to yellow after each digit. Press joystick  to confirm. Press MENU .

At the requested time the page is displayed.

**Teletext**

## User Page Bank System

You can store up to 6 of your favourite teletext pages per Teletext-service in this way you have quick access to the pages you frequently use.

**Storing pages**

- 1 Press  to switch Teletext on. Press MENU .
- 2 Push joystick  to blue or green to select »Set User Pages«.
- 3 Push to blue or green to select the bank item  to E you want.
- 4 Push to blue or green to select the three digits of your first favourite page. Push to yellow after each digit. Push to yellow to confirm.
- 5 Repeat step 4 for the other 5 favourite pages. If you do not want to preset all 6 page numbers push to yellow without inserting any number. After finishing the presetting, press the joystick .
- 6 Push to blue or green to select »Allocate Banks«. Push to yellow to confirm.
- 7 Push to blue or green to select the programme position of the channel which carries the selected service for which you have selected your favourite pages. Push to yellow to confirm.
- 8 Push to blue or green to select the bank item step 3. Press the joystick  to confirm.
- 9 Repeat steps 3 to 8 for the other 4 banks available.

**Displaying User Pages**

- 1 Press MENU .
- 2 Push joystick  to blue or green to select »User Pages«. Push to yellow to confirm.
- 3 Push to blue or green to select the page you want. Press the joystick .

The page is displayed after some seconds.

**or**

- 1 Press .
- 2 Push joystick  to blue or green to select the page you want. Press the joystick .

The page is displayed after some seconds.

**Joystick**

**PAGES/USER PAGES**

1 Book	2 F	3 V	4 D	5 T	6 S	7 %
8 100	9 200	0 300	1 400	2 500	3 600	4 700
5 80	6 150	7 250	8 350	9 450	0 550	1 650
2 10	3 20	4 30	5 40	6 50	7 60	8 70
3 15	4 25	5 35	6 45	7 55	8 65	9 75
4 20	5 30	6 40	7 50	8 60	9 70	0 80
5 25	6 35	7 45	8 55	9 65	0 75	1 85
6 30	7 40	8 50	9 60	0 70	1 80	2 90
7 35	8 45	9 55	0 65	1 75	2 85	3 95
8 40	9 50	0 60	1 70	2 80	3 90	4 00
9 45	0 55	1 65	2 75	3 85	4 95	5 05
0 50	1 60	2 70	3 80	4 90	5 00	6 10
1 55	2 65	3 75	4 85	5 95	6 05	7 15
2 60	3 70	4 80	5 90	6 00	7 10	8 20
3 65	4 75	5 85	6 95	7 05	8 15	9 25
4 70	5 80	6 90	7 00	8 10	9 20	0 30
5 75	6 85	7 95	8 05	9 15	0 25	1 35
6 80	7 90	8 00	9 10	0 20	1 30	2 40
7 85	8 95	9 05	0 15	1 25	2 35	3 45
8 90	9 00	0 10	1 20	2 30	3 40	4 50
9 95	0 05	1 15	2 25	3 35	4 45	5 55
0 00	1 10	2 20	3 30	4 40	5 50	6 60
1 05	2 15	3 25	4 35	5 45	6 55	7 65
2 10	3 20	4 30	5 40	6 50	7 60	8 70
3 15	4 25	5 35	6 45	7 55	8 65	9 75
4 20	5 30	6 40	7 50	8 60	9 70	0 80
5 25	6 35	7 45	8 55	9 65	0 75	1 85
6 30	7 40	8 50	9 60	0 70	1 80	2 90
7 35	8 45	9 55	0 65	1 75	2 85	3 95
8 40	9 50	0 60	1 70	2 80	3 90	4 00
9 45	0 55	1 65	2 75	3 85	4 95	5 05
0 50	1 60	2 70	3 80	4 90	5 00	6 10
1 55	2 65	3 75	4 85	5 95	6 05	7 15
2 60	3 70	4 80	5 90	6 00	7 10	8 20
3 65	4 75	5 85	6 95	7 05	8 15	9 25
4 70	5 80	6 90	7 00	8 10	9 20	0 30
5 75	6 85	7 95	8 05	9 15	0 25	1 35
6 80	7 90	8 00	9 10	0 20	1 30	2 40
7 85	8 95	9 05	0 15	1 25	2 35	3 45
8 90	9 00	0 10	1 20	2 30	3 40	4 50
9 95	0 05	1 15	2 25	3 35	4 45	5 55
0 00	1 10	2 20	3 30	4 40	5 50	6 60
1 05	2 15	3 25	4 35	5 45	6 55	7 65
2 10	3 20	4 30	5 40	6 50	7 60	8 70
3 15	4 25	5 35	6 45	7 55	8 65	9 75
4 20	5 30	6 40	7 50	8 60	9 70	0 80
5 25	6 35	7 45	8 55	9 65	0 75	1 85
6 30	7 40	8 50	9 60	0 70	1 80	2 90
7 35	8 45	9 55	0 65	1 75	2 85	3 95
8 40	9 50	0 60	1 70	2 80	3 90	4 00
9 45	0 55	1 65	2 75	3 85	4 95	5 05
0 50	1 60	2 70	3 80	4 90	5 00	6 10
1 55	2 65	3 75	4 85	5 95	6 05	7 15
2 60	3 70	4 80	5 90	6 00	7 10	8 20
3 65	4 75	5 85	6 95	7 05	8 15	9 25
4 70	5 80	6 90	7 00	8 10	9 20	0 30
5 75	6 85	7 95	8 05	9 15	0 25	1 35
6 80	7 90	8 00	9 10	0 20	1 30	2 40
7 85	8 95	9 05	0 15	1 25	2 35	3 45
8 90	9 00	0 10	1 20	2 30	3 40	4 50
9 95	0 05	1 15	2 25	3 35	4 45	5 55
0 00	1 10	2 20	3 30	4 40	5 50	6 60
1 05	2 15	3 25	4 35	5 45	6 55	7 65
2 10	3 20	4 30	5 40	6 50	7 60	8 70
3 15	4 25	5 35	6 45	7 55	8 65	9 75
4 20	5 30	6 40	7 50	8 60	9 70	0 80
5 25	6 35	7 45	8 55	9 65	0 75	1 85
6 30	7 40	8 50	9 60	0 70	1 80	2 90
7 35	8 45	9 55	0 65	1 75	2 85	3 95
8 40	9 50	0 60	1 70	2 80	3 90	4 00
9 45	0 55	1 65	2 75	3 85	4 95	5 05
0 50	1 60	2 70	3 80	4 90	5 00	6 10
1 55	2 65	3 75	4 85	5 95	6 05	7 15
2 60	3 70	4 80	5 90	6 00	7 10	8 20
3 65	4 75	5 85	6 95	7 05	8 15	9 25
4 70	5 80	6 90	7 00	8 10	9 20	0 30
5 75	6 85	7 95	8 05	9 15	0 25	1 35
6 80	7 90	8 00	9 10	0 20	1 30	2 40
7 85	8 95	9 05	0 15	1 25	2 35	3 45
8 90	9 00	0 10	1 20	2 30	3 40	4 50
9 95	0 05	1 15	2 25	3 35	4 45	5 55
0 00	1 10	2 20	3 30	4 40	5 50	6 60
1 05	2 15	3 25	4 35	5 45	6 55	7 65
2 10	3 20	4 30	5 40	6 50	7 60	8 70
3 15	4 25	5 35	6 45	7 55	8 65	9 75
4 20	5 30	6 40	7 50	8 60	9 70	0 80
5 25	6 35	7 45	8 55	9 65	0 75	1 85
6 30	7 40	8 50	9 60	0 70	1 80	2 90
7 35	8 45	9 55	0 65	1 75	2 85	3 95
8 40	9 50	0 60	1 70	2 80	3 90	4 00
9 45	0 55	1 65	2 75	3 85	4 95	5 05
0 50	1 60	2 70	3 80	4 90	5 00	6 10
1 55	2 65	3 75	4 85	5 95	6 05	7 15
2 60	3 70	4 80	5 90	6 00	7 10	8 20
3 65	4 75	5 85	6 95	7 05	8 15	9 25
4 70	5 80	6 90	7 00	8 10	9 20	0 30
5 75	6 85	7 95	8 05	9 15	0 25	1 35
6 80	7 90	8 00	9 10	0 20	1 30	2 40
7 85	8 95	9 05	0 15	1 25	2 35	3 45
8 90	9 00	0 10	1 20	2 30	3 40	4 50
9 95	0 05	1 15	2 25	3 35	4 45	5 55
0 00	1 10	2 20	3 30	4 40	5 50	6 60
1 05	2 15	3 25	4 35	5 45	6 55	7 65
2 10	3 20	4 30	5 40	6 50	7 60	8 70
3 15	4 25	5 35	6 45	7 55	8 65	9 75
4 20	5 30	6 40	7 50	8 60	9 70	0 80
5 25	6 35	7 45	8 55	9 65	0 75	1 85
6 30	7 40	8 50	9 60	0 70	1 80	2 90
7 35	8 45	9 55	0 65	1 75	2 85	3 95
8 40	9 50	0 60	1 70	2 80	3 90	4 00
9 45	0 55	1 65	2 75	3 85	4 95	5 05
0 50	1 60	2 70	3 80	4 90	5 00	6 10
1 55	2 65	3 75	4 85	5 95	6 05	7 15
2 60	3 70	4 80	5 90	6 00	7 10	8 20
3 65	4 75	5 85	6 95	7 05	8 15	9 25
4 70	5 80	6 90	7 00	8 10	9 20	0 30
5 75	6 85	7 95	8 05	9 15	0 25	1 35
6 80	7 90	8 00	9 10	0 20	1 30	2 40
7 85	8 95	9 05	0 15	1 25	2 35	3 45
8 90	9 00	0 10	1 20	2 30	3 40	4 50
9 95	0 05	1 15	2 25	3 35	4 45	5 55
0 00	1 10	2 20	3 30	4 40	5 50	6 60
1 05	2 15	3 25	4 35	5 45	6 55	7 65
2 10	3 20	4 30	5 40	6 50	7 60	8 70
3 15	4 25	5 35	6 45	7 55	8 65	9 75
4 20	5 30	6 40	7 50	8 60	9 70	0 80
5 25	6 35	7 45	8 55	9 65	0 75	1 85
6 30	7 40	8 50	9 60	0 70	1 80	2 90
7 35	8 45	9 55	0 65	1 75	2 85	3 95
8 40	9 50	0 60	1 70	2 80	3 90	4 00
9 45	0 55	1 65	2 75	3 85	4 95	5 05
0 50	1 60	2 70	3 80	4 90	5 00	6 10
1 55	2 65	3 75	4 85	5 95	6 05	7 15
2 60	3 70	4 80	5 90	6 00	7 10	8 20
3 65	4 75	5 85	6 95	7 05	8 15	9 25
4 70	5 80	6 90	7 00	8 10	9 20	0 30
5 75	6 85	7 95</td				

## Optional Equipment

### Connecting Optional Equipment

You can connect a wide range of optional equipment to your TV. Refer to the illustrations on the back flap page of this Instruction Manual.

Symbol	Acceptable input signals	Available output signals
⊕1	Normal audio/video and RGB	Audio/video from TV tuner
⊕2/⊖2	Normal audio/video and Svideo	Audio/video from selected source
⊖3, ⊖3	Normal audio/video and Svideo	No output

#### About S video input

Video signals may be separated into Y (luminance) and C (chrominance) signals. Separating the two signals prevents interference and thus improves the picture quality.

#### Tips:

- If the picture or sound is distorted, move the VCR away from the TV.
- When connecting a monaural VCR, connect only the white jack to both the TV and VCR.

### Selecting Input and Output Signals

#### a) Direct Access Buttons

Selecting the Input

Press ⊕ ⊖ ⊕ ⊖ repeatedly to select one of the following input modes:

Symbol on the screen	Input signals
⊖1	Audio/video through Euro AV connector J
⊖2	RGB through Euro AV connector J
⊖2	Audio/video through Euro AV connector L
⊖2	S video through Euro AV connector L
⊖3	Audio/video through the phono jacks C
⊖3	S video through the 4-pin DIN E

Press ⊕ ⊖ to restore the normal TV picture.

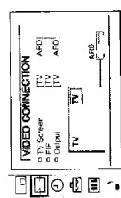
#### Selecting the Output from Euro AV connector ⊕2/⊖2 J

Press ⊕ ⊖ ⊕ ⊖ repeatedly to select one of the following output sources for the connector ⊕2/⊖2 J.

Symbol on the screen	⊕2/⊖2 J connector output signal
1 ⊕3	Audio/video from Euro AV connector J
2 ⊕	Audio/video from Euro AV connector L
2 ⊖	Audio/video from Euro AV connector L
3 ⊕	Audio/video from the 4 Phone jacks C
3 ⊖	Audio/video from the 4-pin DIN E
IV	Audio/video from the aerial terminal T K

## Optional Equipment

### b) Using the Menu »Video Connection«



- Press MENU ⊕.
- Push joystick ⊕ to blue or green to select the symbol ⊕ on the menu screen.
- Push ⊕ to yellow to confirm.
- Push to blue or green to select »TV screen« (input source for TV screen), »PIP source for PIP screen«, or »Output« (output source for ⊕2/⊖2 J).
- Push ⊕ to yellow to confirm.

You can select between the following sources:

- TV: TV-tuner • YC: 5 video signal • AV: Audio/Video
- TV screen: TV, AV1, RGB, AV2, YC2, AV3, YC3
- PIP: TV, AV1, AV2, YC2, AV3, YC3
- Output: TV, AV1, AV2, YC2, AV3, YC3

- Push ⊕ to blue or green to select the desired source. Press joystick ⊕ to store.

5 Press MENU ⊕ to restore the normal TV picture.

### Remote Control of other Sony Equipment

Using the buttons ⊕ on the Remote Commander you can control other Sony equipment.

- Set the selector VTR 1 2 3 MDP according to the equipment you want to control.
- VTR 1: Beta VCR  
VTR 2: Sony VCR  
VTR3: VHS VCR  
MDP: Video Disk Player
- Use the buttons ⊕ on the Remote Commander to operate the equipment.

#### Tips

- If your video equipment has a COMMAND MODE selector, set this selector to the same position as the VTR 1 2 3 MDP selector on the TV Remote Commander.
- If the equipment does not have a certain function, the corresponding button on the Remote Commander does not work.

## Additional Information

### Troubleshooting

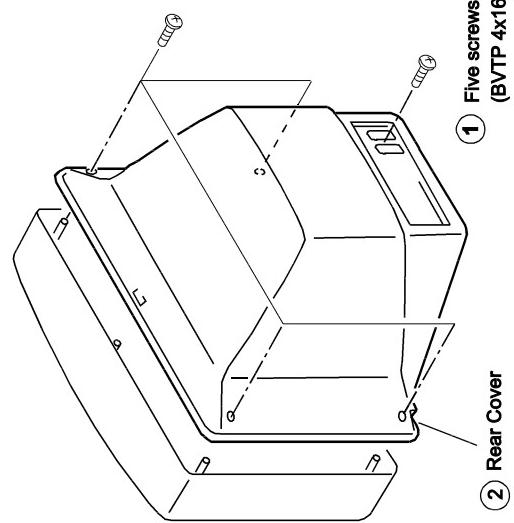
Here are some simple solutions to problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none"><li>• Plug the TV in.</li><li>• Press <b>①</b> on the TV. (If <b>②</b> indicator <b>H</b> is on, press <b>C</b>, <b>B</b> or a programme number <b>③</b> on the Remote Commander.)</li><li>• Check the aerial connection.</li><li>• Check if the selected video source is on.</li><li>• Turn the TV off for 1 or 2 seconds and then turn it on again using <b>①</b>.</li></ul>
Poor or no picture (screen is dark), but good sound	<ul style="list-style-type: none"><li>• Press <b>④</b> <b>⑤</b> to enter the PICTURE CONTROL menu and adjust <b>Brightness</b>, <b>Contrast</b>, and <b>Colour</b>.</li></ul>
Poor picture quality when watching an RGB video source	<ul style="list-style-type: none"><li>• Press <b>C</b>, <b>B</b> repeatedly to select <b>⑥</b>.</li></ul>
Good picture but poor or no sound	<ul style="list-style-type: none"><li>• Press <b>⑦</b>.</li><li>• If <b>⑧</b> is displayed on the screen, press <b>⑨</b>.</li></ul>
No colour for colour programmes	<ul style="list-style-type: none"><li>• Press <b>⑩</b> <b>⑪</b> to enter the PICTURE CONTROL menu, select <b>RESET</b>, then press joystick <b>⑫</b>.</li></ul>
Remote Commander does not function	<ul style="list-style-type: none"><li>• Replace batteries.</li></ul>

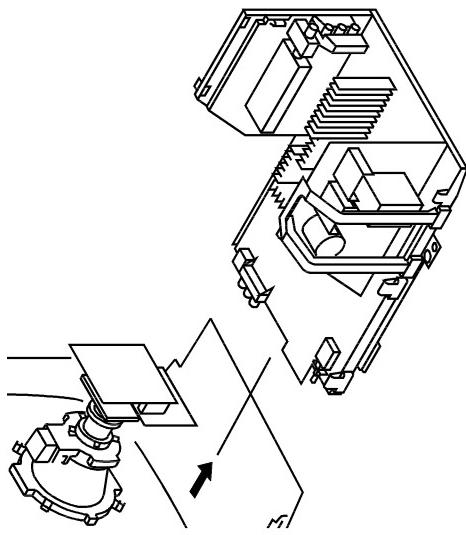
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

## SECTION 2 DISASSEMBLY

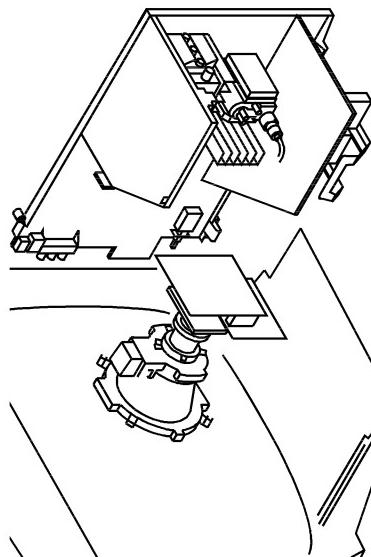
### 2-1. REAR COVER REMOVAL



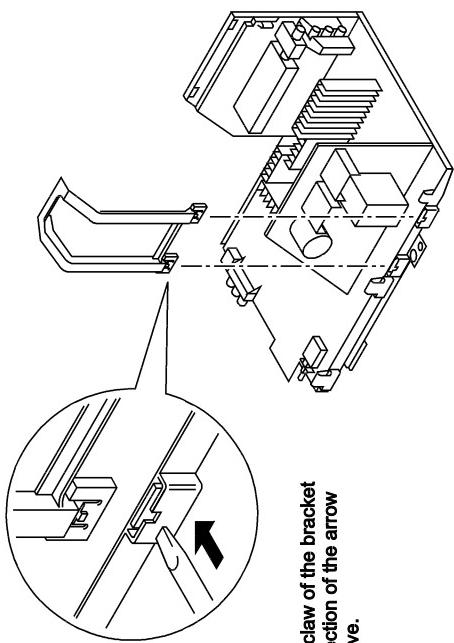
### 2-2. CHASSIS ASSY REMOVAL



### 2-3. SERVICE POSITION

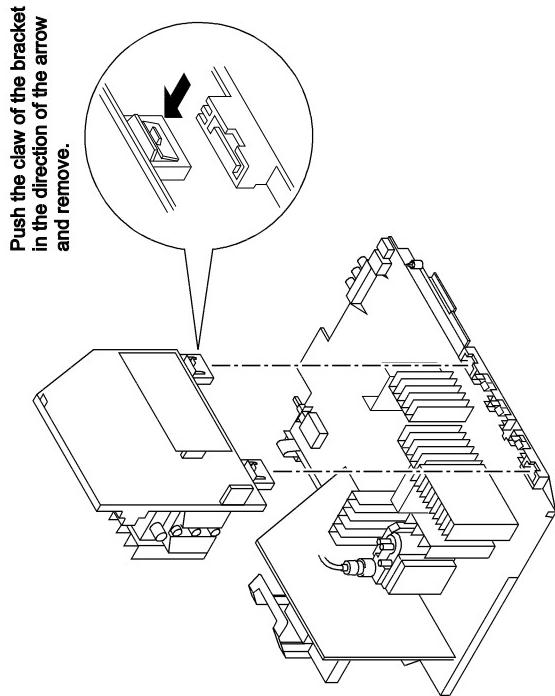


### 2-4. G BOARD REMOVAL

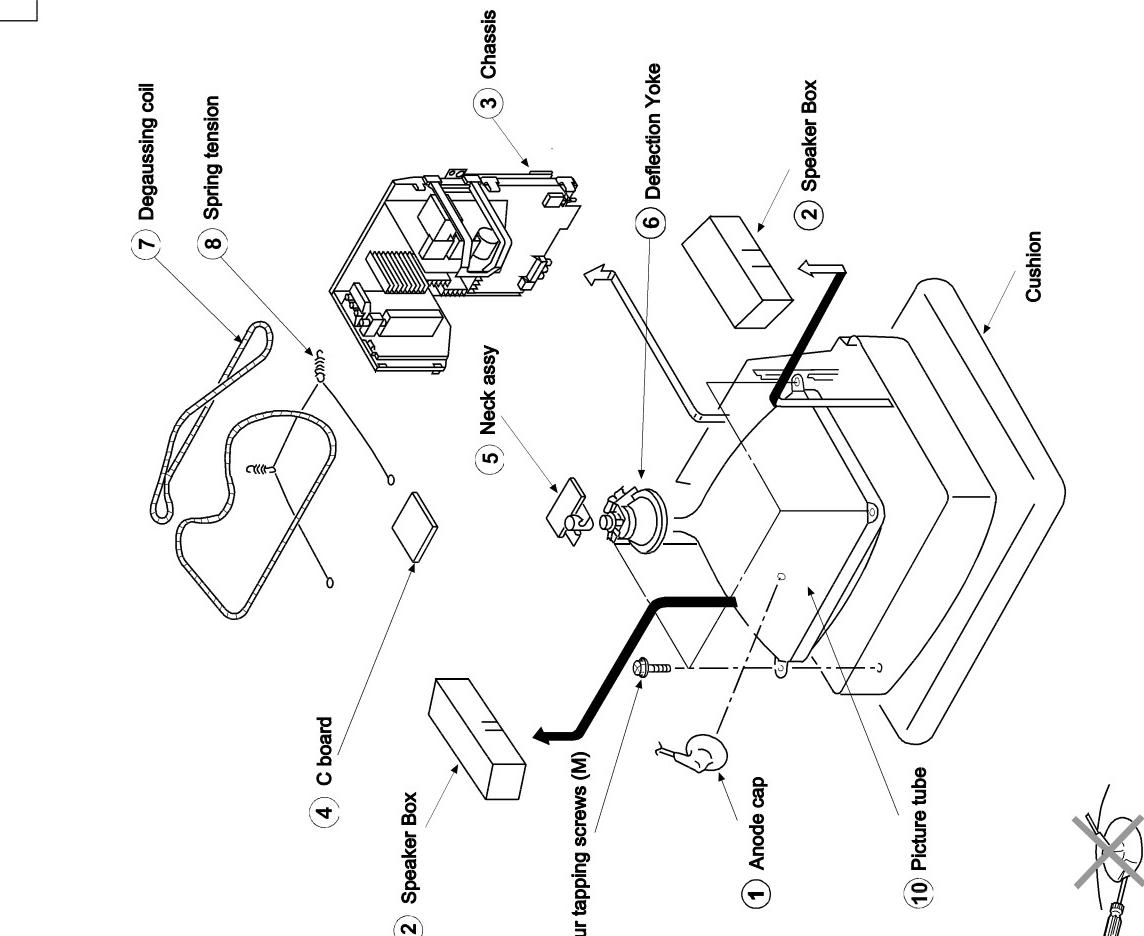


Push the claw of the bracket  
in the direction of the arrow  
and remove.

## 2-5. A BOARD REMOVAL



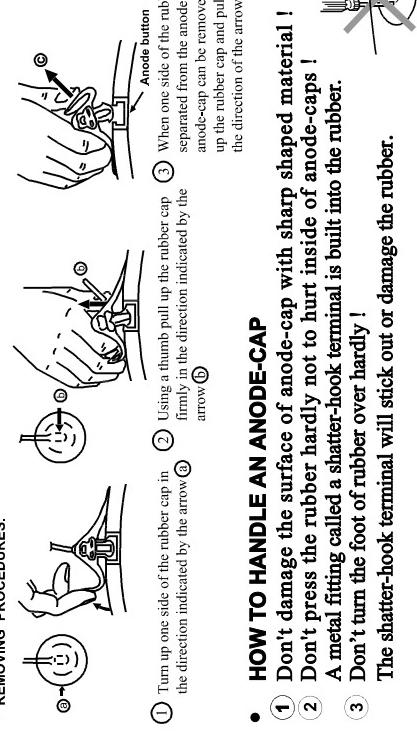
## 2-6. PICTURE TUBE REMOVAL



### • REMOVAL OF ANODE-CAP

**Note:** Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

#### \* REMOVING PROCEDURES.



### • HOW TO HANDLE AN ANODE-CAP

- ① Don't damage the surface of anode-cap with sharp shaped material !
- ② Don't press the rubber hardly not to hurt inside of anode-caps !
- A metal fitting called a shatter-hook terminal is built into the rubber !
- ③ Don't turn the foot of rubber over hardly !

## REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

### (1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the D Board printed circuit, the bottom plates fitted to the main chassis bracket require to be removed. This is performed by cutting the gates with a sharp wire cutter at the locations shown and indicated by arrows.

**Note :** There are 5 plates fitted to the main bracket and secured by 4 or 6 gates. Only remove the necessary plate to gain access to the circuit board.

### (2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

The plates are identified by markings A-B-C-D-E on their top side.

1. Identify the plate by locating its marking.
2. Turn the plate over, noting where the marking is located.
3. Locate the corresponding marking indicated on the main chassis bracket. See Fig 2.
4. Refit the plate as indicated in Fig 3 with the markings located next to each other.

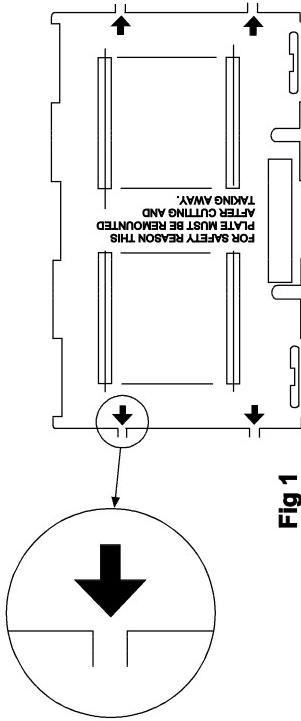


Fig 1

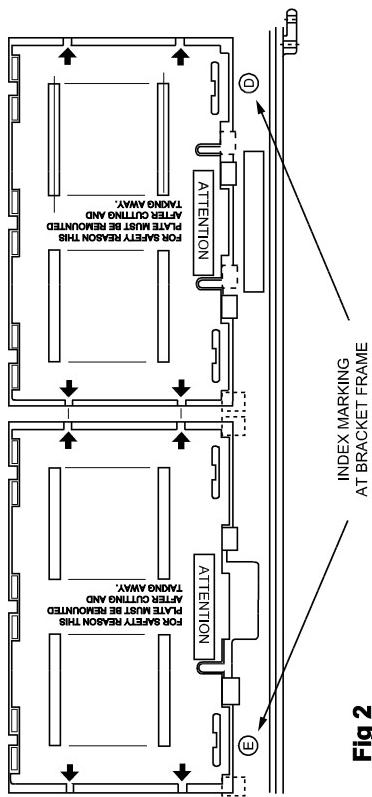


Fig 2

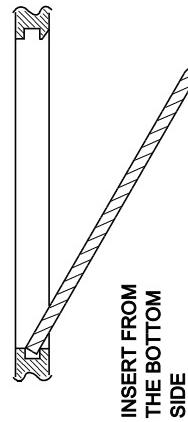


Fig 3

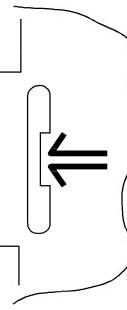


Fig 4

In the event of the plates requiring to be removed at a later stage, this can be achieved by inserting a screwdriver in the snap-recess indicated as in Fig 4 and lifting out.

## SECTION 3

### SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustment with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches as follows.

Contrast ..... normal  
 Brightness ..... normal

- Carry out the following adjustments in this order:
- 3-1. Beam landing
  - 3-2. Convergence
  - 3-3. Focus
  - 3-4. White balance

**Note:** Testing equipment required.

1. Color bar/pattern generator
2. Degausser
3. Vector scope

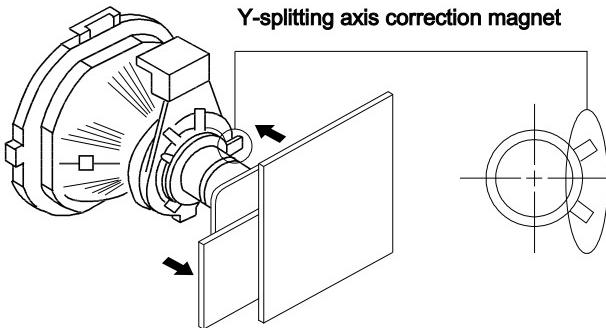
#### 3-1. BEAM LANDING

##### Preparation:

- In order to reduce the influence of geomagnetism on the set's picture tube face it in an easterly or westerly direction.
- Switch on the set's power and degauss with the degausser.

##### (1) Adjustment of Correction Magnet for Y-Splitting Axis

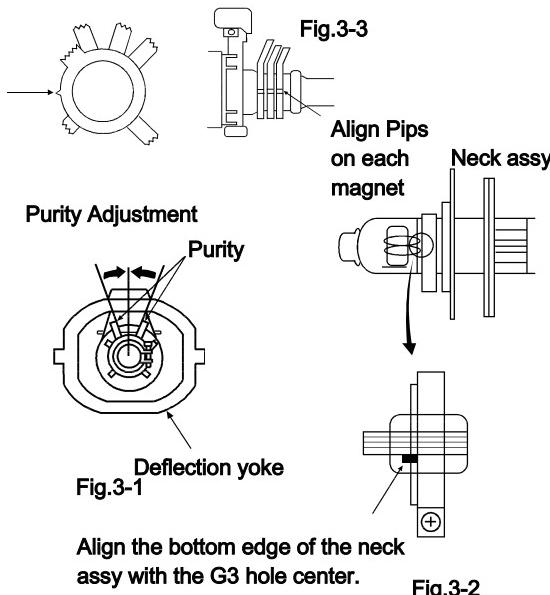
- Input a crosshatch signal from the pattern generator.
- Picture control is minimum and brightness control is still normal.
- Position the neck assy as shown in Fig. 3-2.
- Move the deflection yoke forward to touch the CRT and it stands up rightly.
- Adjust the upper pin and the lower pin symmetrically by opening or closing the Y-splitting axis correction magnets on the neck assy.
- Return the deflection yoke to its original position.



##### (2) Landing

**Note:** Before carrying out the following adjustments adjust the magnets as indicated below (See Fig. 3-3).

- Input an all-white signal from the pattern generator.  
Maximize the picture setting and adjust the brightness setting.
- Rough-adjust the focus and horizontal convergence.
- Loosen the deflection yoke screws, align the purity adjustment knob to the central position. (See Fig. 3-1)
- Switch from the all-white pattern to an all-green pattern.
- Move the deflection yoke backwards and adjust with the purity magnet so that the green is at the center and it aligns symmetrically. (See Fig. 3-4)
- Move the deflection yoke forward and adjust so that entire screen becomes green.
- Switch the raster signal to red, then to blue and verify the landing condition.
- When the position of the deflection yoke has been determined, fasten the deflection yoke with the screw.
- If the beam does not land correctly in all the corners, use magnets to correct it. (See Fig. 3-5)



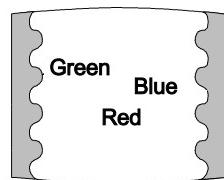


Fig.3-4

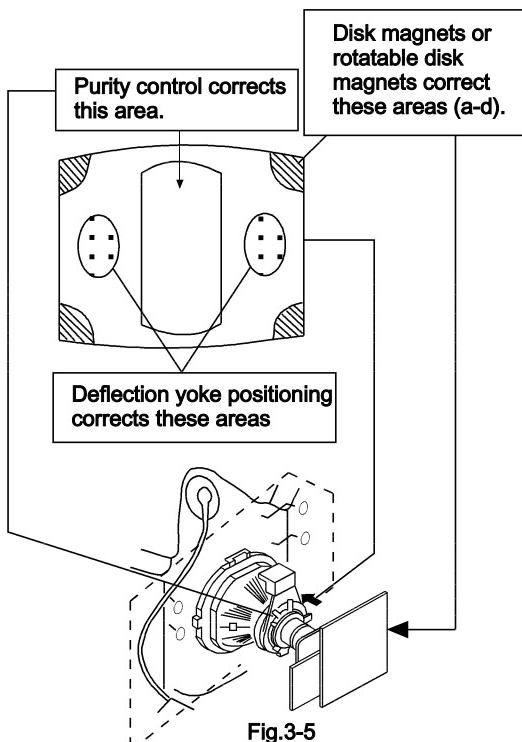
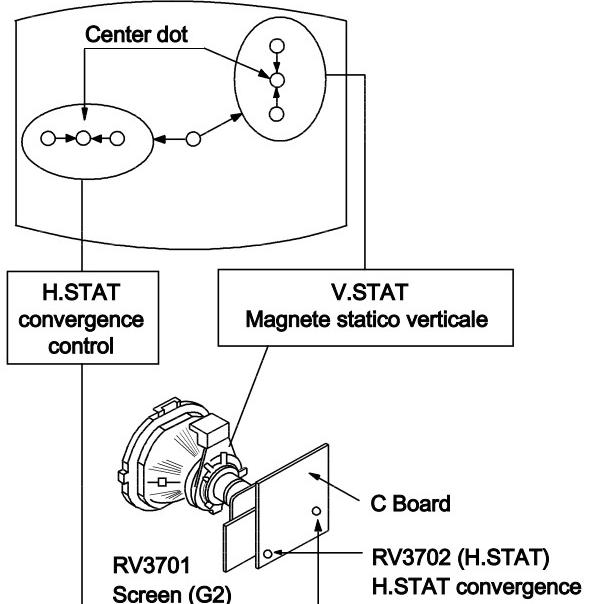


Fig.3-5

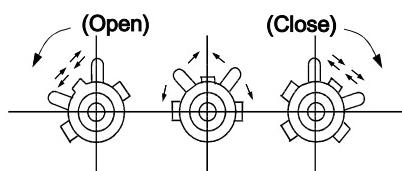
### 3-2. CONVERGENCE

#### (1) Screen center convergence (Static convergence)

1. Input a dot signal from the pattern generator. Normalize the picture setting.
2. (Moving horizontally), adjust the H.STAT control so that the horizontal red, green and blue dots coincide at the center of screen.
3. (Moving vertically), adjust the V.STAT magnet so that the vertical red, green and blue points coincide at the center of screen.

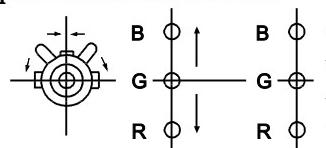


- If the horizontal dots are unable to coincide with the variable range of the H.STAT convergence, adjust together with the V.STAT convergence while tracking.  
(Adjust the convergence by tilting the V.STAT convergence or by opening or closing the V.STAT convergence.)

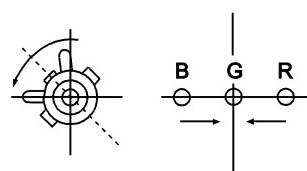


4. Movement of the red, green and blue dots by tilting the V.STAT magnet and by opening or closing the V.STAT magnet.

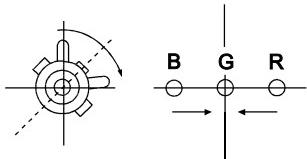
- ① By opening or closing the V.STAT magnet, the red, green and blue points move as shown below



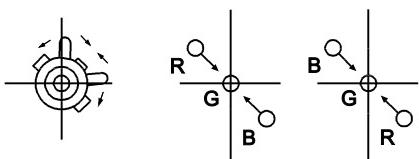
- ② By rotating the V. STAT magnet counterclockwise, the red, green and blue dots move as shown below.



- ③ By rotating the V.STAT magnet clockwise, the red, green and blue dots move as shown below.



- ④ By opening or closing the V.STAT magnet, the red, green and blue dots move as shown below.

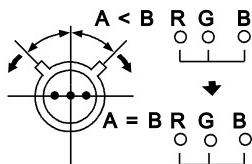


- If the blue dot does not coincide with the red and green points, correct the points by using the BMC (Hexapole) magnet.

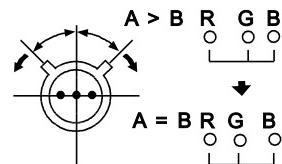
- ⑤ Correction for HMC (horizontal mis-convergence) and VMC (vertical mis-convergence) by using the BMC (Hexapole) magnet.

- ① HMC correction by BMC (Hexapole) magnet and movement of the electronic beam.

HMC correction(A)

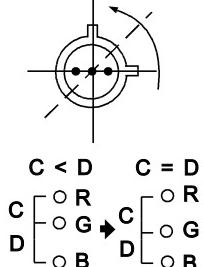


HMC correction(B)

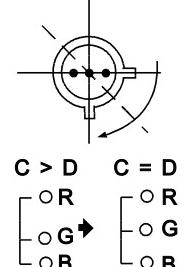


- ② VMC correction by BMC (Hexapole) magnet and movement of the electronic beam.

VMC correction(A)



VMC correction(B)



**Layout of each control**

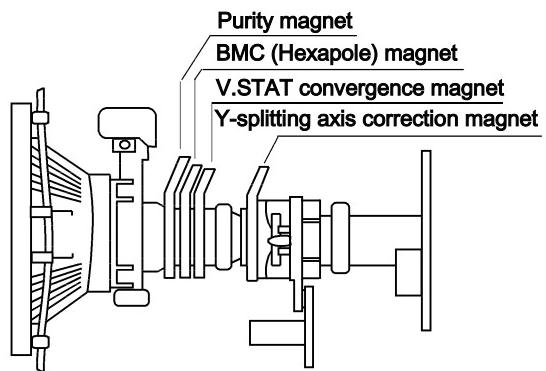
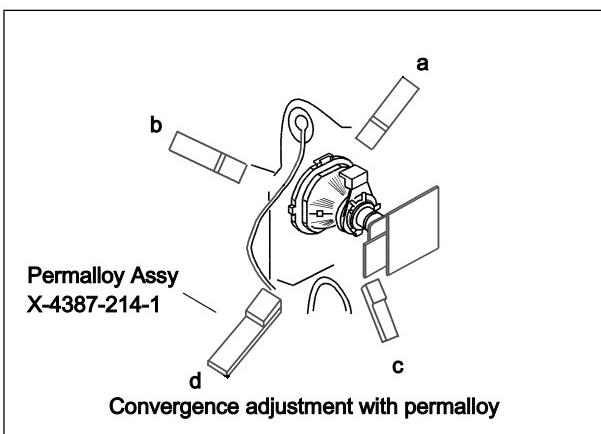
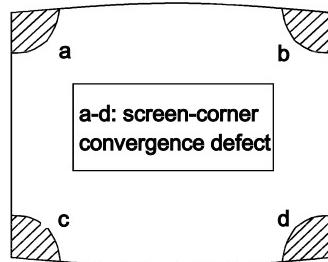


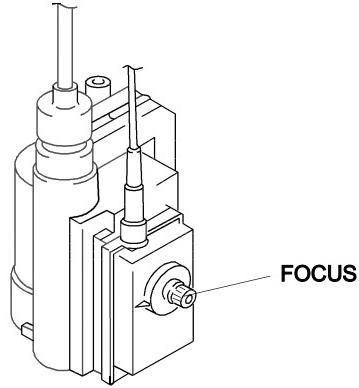
Fig.3-6

5. If you are unable to adjust the corner convergence properly, correct them with the use of permalloys.



### 3-3. Focus

1. Receive a television broadcast signal.
2. Normalize the picture setting.
3. Adjust the focus control on the flyback transformer for the best focus at the center of the screen.  
Bring only the center area of the screen into focus, the magenta-ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.



**Video Proc. TDA4780**

Item No	Adjustment item	Data Amount
1	BRT	USER CONTROL
2	COL	USER CONTROL
3	PIC	USER CONTROL
4	HUE	USER CONTROL
5	R GAIN	31
6	G GAIN	Adj
7	B GAIN	Adj
8	R LVL REF	31
9	G LVL REF	Adj
10	B LVL REF	Adj
11	PEAK DRV LIMIT	63
12	GAMMA	31
13	SCP ON = 3LEV OFF = 2LEV	ON
14	DELAY	OFF

### 3-4. Screen (G2), White balance (Adjustment in the service mode with remote commander)

#### G2 adjustment (RV3701)

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 170V DC from an external power supply to the R, G and B cathodes of the CRT.
4. While watching the picture, adjust the G2 control RV3701 [ SCREEN ] on the C board to the point just before the return lines disappear.

#### White balance adjustment

1. Receive an all-white signal.
2. Enter into the Service Mode by pressing 'TEST', 'TEST' and 'MENU' on the Service Commander.
3. Select 'VIDEO PROC.' from the on screen menu display and press OK .
4. The 'VIDEO PROC TDA4780' menu will appear on the screen.

5. Set picture to MAX.
6. Set the 'R GAIN' to 25.
7. Adjust the 'G GAIN' and 'B GAIN' so that the white balance becomes optimum.
8. Press the OK button to write the data for each item.
9. Set picture to MIN.
10. Set the 'R LVL REF' to 31.
11. Adjust 'G LVL REF', and 'B LVL REF' with the left and right buttons so that the white balance becomes optimum.
12. Press the OK button to write the data for each item.

## SECTION 4

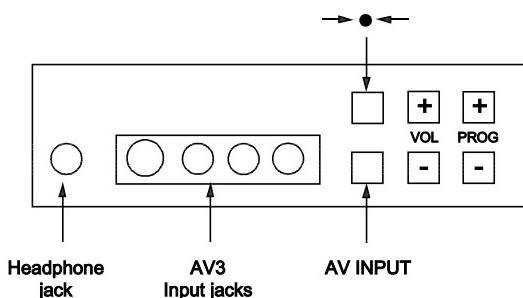
### CIRCUIT ADJUSTMENTS

#### 4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander, RM-862.

##### HOW TO ENTER INTO SERVICE MODE

- Turn on the main power switch of the set while pressing the PROG + (plus) and PROG - (minus) buttons on the front panel.



- "TT" will appear on the upper right corner of the screen.
- Press "MENU" on the commander to get the service menu on screen.

DEVICES	
Init TV	
Pip, Lumisponder & Autoside	
Sub Adjust	
Video Proc	TDA4780
Col Dec Main	TDA9144
Deflect. Cont	SDA9361
Col Dec Sub	TDA9143
Feature Box	S87C654
AI	TDA9170
DA	SDA9280
Single PIP	SDA9288
Sound	
Line23 det	

- Push the joystick up (green) or down (blue) on the remote commander to select the adjustment item.
- Press the center button to proceed to the next menu.
- If the adjustment item is 'Video Proc.', push the down button to move to 'Video Proc.'.
- The Menu as indicated in Fig 4-3 will appear on the screen.
- Move the joystick up or down to move to the adjustment item and press the center (OK) button.
- Change the data in order to comply with each standard.

Item No	Adjustment Item	Data Amount
1	BRT	USER CONTROL
2	COL	USER CONTROL
3	PIC	USER CONTROL
4	HUE	USER CONTROL
5	R GAIN	31
6	G GAIN	Adj
7	B GAIN	Adj
8	R LVL REF	31
9	G LVL REF	Adj
10	B LVL REF	Adj
11	PEAK DRV LIMIT	63
12	GAMMA	31
13	SCP ON = 3LEV OFF = 2LEV	ON
14	DELAY	OFF
15	DATA BUFF	OFF
16	NTSC MATRIX	OFF
17	HDTV	OFF
18	FSBL	OFF
19	AUTO CUT OFF	ON
20	FSW 2 DIS	OFF
21	FSW 2	OFF
22	FSW 1 DIS	OFF
23	FSW 1	OFF
24	ADAPT BLACK	OFF
25	Y HIGH 1V	OFF
26	MOD2	OFF
27	BLUE STRETCH	OFF
28	VM OUT	OFF
29	PEAK DRV ABS	ON
30	TIME CNST PEAK LIMIT	OFF

Fig. 4-3

## SDA9361 (VIDEO PROC.)

Item No	Adjustment Item	Data Amount
1	HDE	ON
2	VR	0
3	RABL	ON
4	BLK DIS	OFF
5	2FH 2*LINE FRQ	ON
6	STANDBY MODE	OFF
7	VERTICAL	ON
8	BSE BLK SELECT	OFF
9	SSE START SCAN	OFF
10	SRSE START RED SCAN	OFF
11	GBE GUARD BAND	OFF
12	STE SCAN TIME TABLE	OFF
13	NSA SELF ADAPTION	ON
14	V SHIFT	ADJ
15	V SIZE	ADJ
16	V LIN	ADJ
17	V S-COR	ADJ
18	V EHT COMP	25" = 78 29" = 100 28" = 36 32" =
19	H SIZE	ADJ
20	PIN PHASE	ADJ
21	PIN AMP	ADJ
22	UP COR PIN	ADJ
23	LOW COR PIN	ADJ
24	H EHT COMP	25" = 78 29" = 100 28" = 36 32" =
25	H SHIFT	ADJ
26	V ANGLE	ADJ
27	V BOW	ADJ
28	PWM START	0

Item No	Adjustment Item	Data Amount
29	D/A	0
30	V BLK TIME	0
31	H BLK TIME	0
32	STAR V SCAN	0
33	H BLK PHASE	0
34	V SCAN WIDTH 0	0
35	V SCAN WIDTH 1	0
36	GUARD BAND	0
37	START RED SCAN	0
38	NUMBER FIELDS	1
39	NI NON INTERLACE	OFF
40	NR VSYNC NOISE RED	ON
41	SCC WITH VBL	ON
42	MIN LINES/FIELD	0
43	MAX LINES/FIELD	0
44	AFC EHT COMP	0
45	PLL FREQ	6
46	VCR	ON
47	GEN MOD	OFF
48	H SWID	ON
49	INT H PHASE	239
50	PWM WIDTH	0
51	NOISY VCR	OFF
52	KILLZIP	OFF
53	TC3RD	OFF
54	BANDGAP 4 OFF	OFF
55	BANDGAP OFF	OFF
56	BANDGAP	0

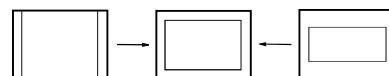
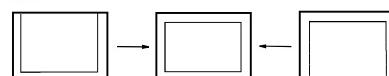
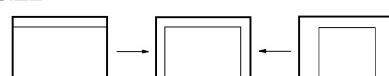
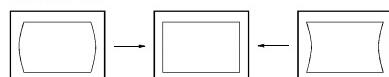
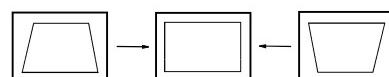
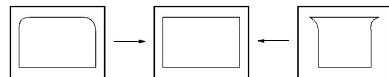
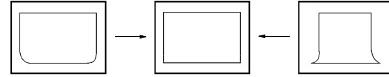
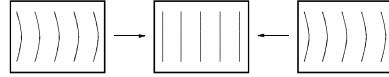
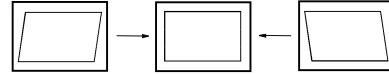
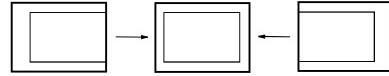
**TDA4780 (VIDEO PROC.)**

Item No	Adjustment Item	Data Amount
1	BRT	USER CONTROL
2	COL	USER CONTROL
3	PIC	USER CONTROL
4	HUE	USER CONTROL
5	R GAIN	25
6	G GAIN	Adj
7	B GAIN	Adj
8	R LVL REF	31
9	G LVL REF	Adj
10	B LVL REF	Adj
11	PEAK DRV LIMIT	0
12	GAMMA	31
13	SCP ON = 3LEV OFF = 2LEV	ON
14	DELAY	OFF
15	DATA BUFF	OFF
16	NTSC MATRIX	OFF
17	HDTV	OFF
18	FSBL	OFF
19	AUTO CUT OFF	ON
20	FSW 2 DIS	OFF
21	FSW 2	OFF
22	FSW 1	OFF
23	FSW 1	OFF
24	ADAPT BLACK	OFF
25	Y HIGH 1V	OFF
26	MOD2	OFF
27	BLUE STRETCH	OFF
28	VM OUT	OFF
29	PEAK DRV ABS	ON
30	TIME CNST PEAK LIMIT	OFF

**DEFLECTION SYSTEM ADJUSTMENT**

1. Enter into the service mode and select 'Deflect cont.' The 'Deflect cont. SDA9361' adjustment menu will be displayed.
2. Select and adjust each item in order to get an optimum image.

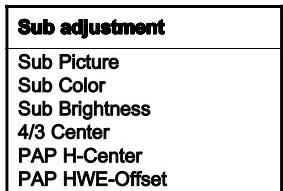
Item No	Adjustment item	Data Amount
1	HDE	ON
2	VR	0
3	RABL	ON
4	BLK DIS	OFF
5	2FH 2LINE FRQ	ON
6	STANDBY MODE	OFF
7	VERTICAL	ON
8	BSE BLK SELECT	OFF
9	SSE START SCAN	OFF
10	SRSE START RED SCAN	OFF
11	GBE GUARD BAND	OFF
12	STE SCAN TIME TABLE	OFF
13	NSA SELF ADAPTION	ON
14	V SHIFT	ADJ
15	V SIZE	ADJ
16	V LIN	ADJ
17	V S-COR	ADJ
18	V EHT COMP	25" = 78 29" = 100 28" = 36
19	H SIZE	ADJ
20	PIN PHASE	ADJ
21	PIN AMP	ADJ
22	UP COR PIN	ADJ
23	LOW COR PIN	ADJ
24	H EHT COMP	25" = 78 29" = 100 28" = 36
25	H SHIFT	ADJ
26	V ANGLE	ADJ
27	V BOW	ADJ
28	PWM START	0

**V SIZE****V POS****V LIN****H SIZE****H PIN CUSH****H TILT****H UP COR****H LOWER COR****AFC V BOW****AFC V ANGLE****H POS**

## **4-2. VOLUME ELECTRICAL ADJUSTMENTS**

### **Sub Brightness Adjustment**

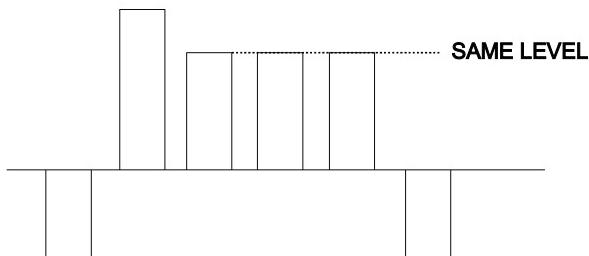
1. Enter Service Mode (Device Menu).
2. Select 'SUB ADJUST MENU'.



3. Adjust the value according to the following advice.

### **Sub Color Adjustment**

1. Input a PAL color bar signal.
2. Connect an oscilloscope to CN3703.
3. Enter into 'SERVICE MODE'.
4. Choose 'SUB ADJUST'.
5. Enter into Sub Color mode.
6. Adjust data so that the right sides of the waveforms are of equal height.



### 4-3. TEST MODE 2:

Is available by pressing the Test button twice, OSD "TT" appears. The functions described below are available by pressing the two numbers. To release Test Mode 2, press 0, 10, 20 ... twice or switch the TV into Standby Mode. Pressing the two Local Control buttons (+ and -) during Power ON will also switch into "TT" mode.

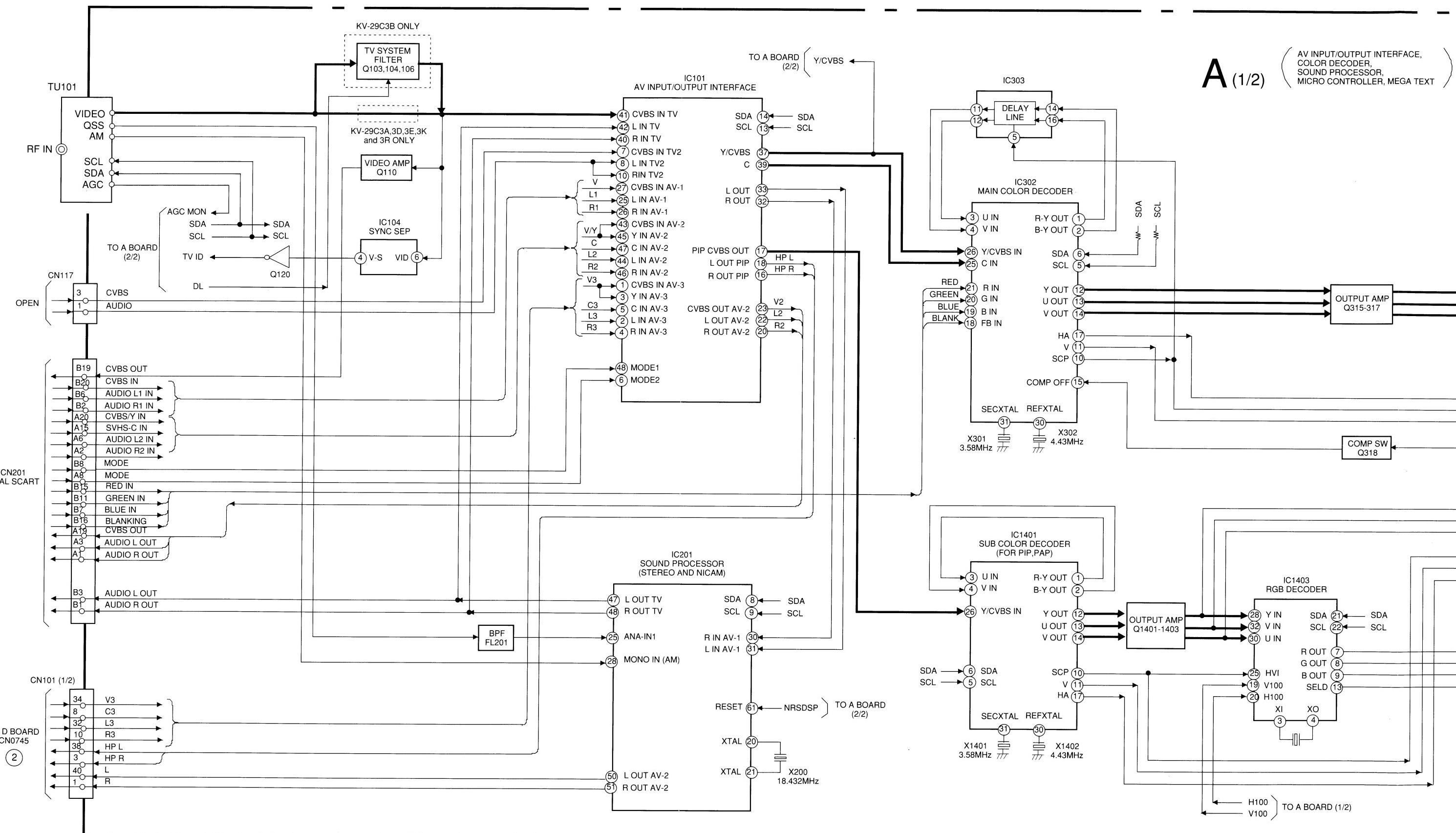
In TT mode, it is possible to remove the Menu from the screen by pressing the Speaker Off button once. Pressing the Speaker OFF button a second time will cause the menu to reappear . The Function is kept even when the menu is not displayed!!

00	Switch back to normal mode - TT mode off	31	no function
01	Switch service menu on	32	no function
02	Direct access to Noise reduction	33	no function
03	Set volume to 30%	34	no function
04	Service menu in "Service Mode"	35	no function
05	Service menu in "Production Mode"	36	no function
06	Set Volume to 80%	37	no function
07	Aging Mode	38	Screen Position
08	Shipping Condition	39	Reset Programme Table
09	Language Reset	40	See TT10
10	The TT number will be deleted	41	Picture Min
11	Direct access to Balance	42	no function
12	Direct access to Hue	43	no function
13	Display of TV set configuration	44	no function
14	Production Info Display	45	Set NVM to Protect mode
15	Read Analog from ROM	46	IR Channel Presetting Mode. The channel presetting can be done by a Special transmitter. Sequence: TT46 -> -PR Number select display appears Select Prog. No. from where the channel shall be stored. -> Now TV is waiting for IR sequence <- -> If no IR transmission starts TT46 is released after 20 secs <-! Note: when TT46 is active, any transmission will be interpreted as PROG data !
16	Save Analog F in NVM	47	no function
17	This function presets the Labels for the AV sources: AV1, RGB, AV2, YC2, AV3, YC3, AV4, YC4.	48	no function
18	No function	49	New Initialize
19	No function	50	See TT10
20	See TT10	51	Strobo mode is activated.
21	Picture Rotation automatic function: (-4) -> (+4) -> 0	52	no function
22	Error Monitor Display	53	no function
23	Direct access to Sub Brightness Adjustment.	54	Direct access to Velocity Modulation VM (Production use)
24	Direct access to Sub Colour.	55	Slicer High
25	Status Menu Display	56	Slicer No
26	Text Character selection (Char set 06 -> West Europe)	57	Megatext Service Menu on
27	Text Character selection (Char set 38 -> East Europe)	58	MTX Small Framing Code Window
28	Text Character selection (Char set 40 -> West Europe) US English		
29	Text Character selection (Char set 55 -> West Europe) Turkish		
30	See TT10		

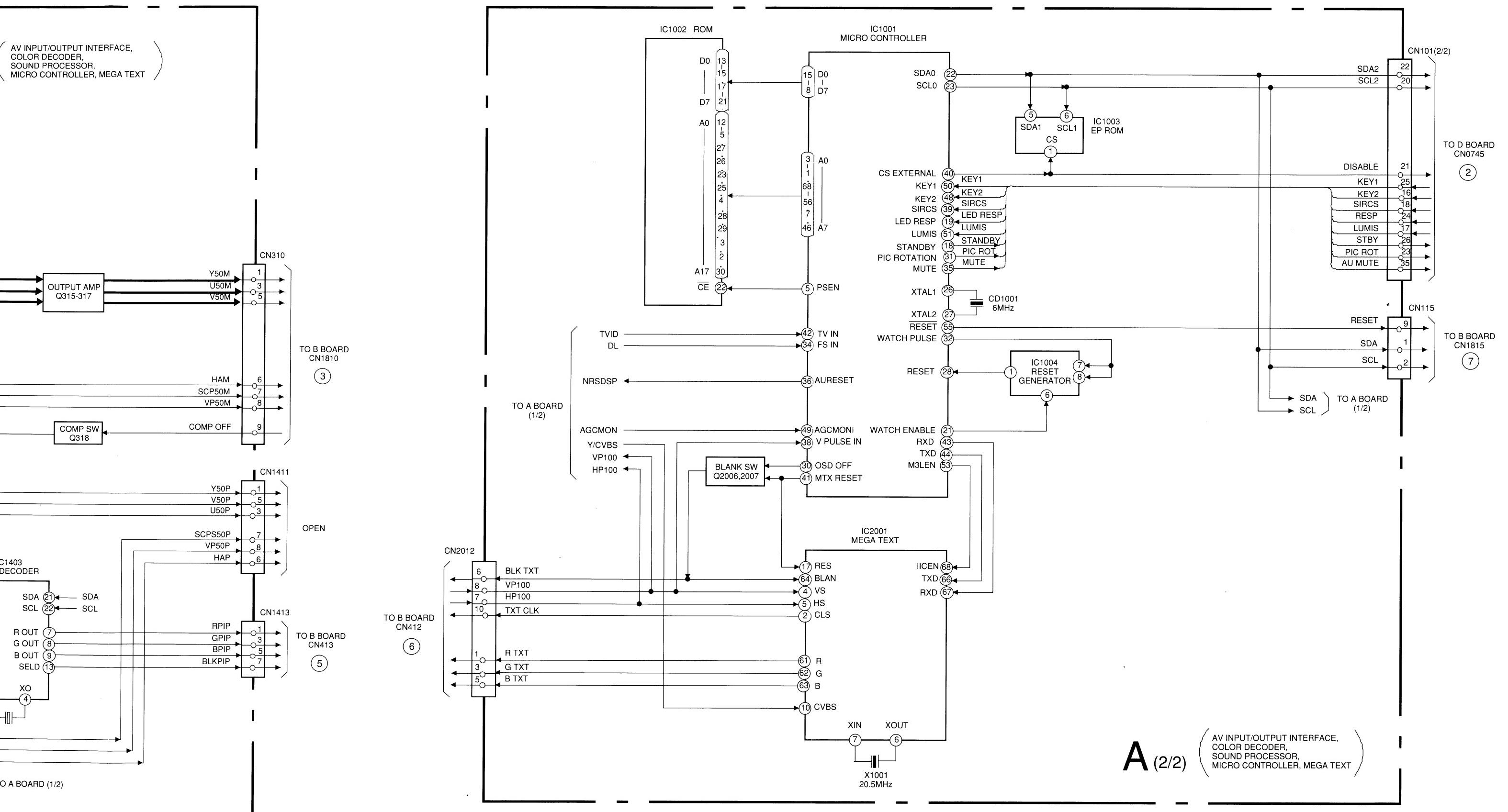
59	MTX Wide Framing Code Window
60	See TT10
61	no function
62	no function
63	no function
64	Reset all IIC Slave commands (Production use)
65	Reset stored error codes in NVM
66	Feature box and Pal Plus
67	no function
68	Ignore Errors - on
69	Ignore errors - off
70	See TT10
71	no function
72	no function
73	Megatext RGB textlevel one step decreased.
74	Megatext RGB textlevel one step decreased (max 1 steps down starting from E0h) (Production use)
75	no function
76	SDA9361
77	SDA9280
78	PIP
79	no function
80	See TT10
81	S87C654 Default data setting
82	no function
83	no function
84	TDA4780 Default data setting
85	no function
86	TDA9143 Default data setting
87	SDA9288 Default data setting
88	Char set Russian
89	Char set Russian (esc)
90	See TT10

## DIAGRAMS

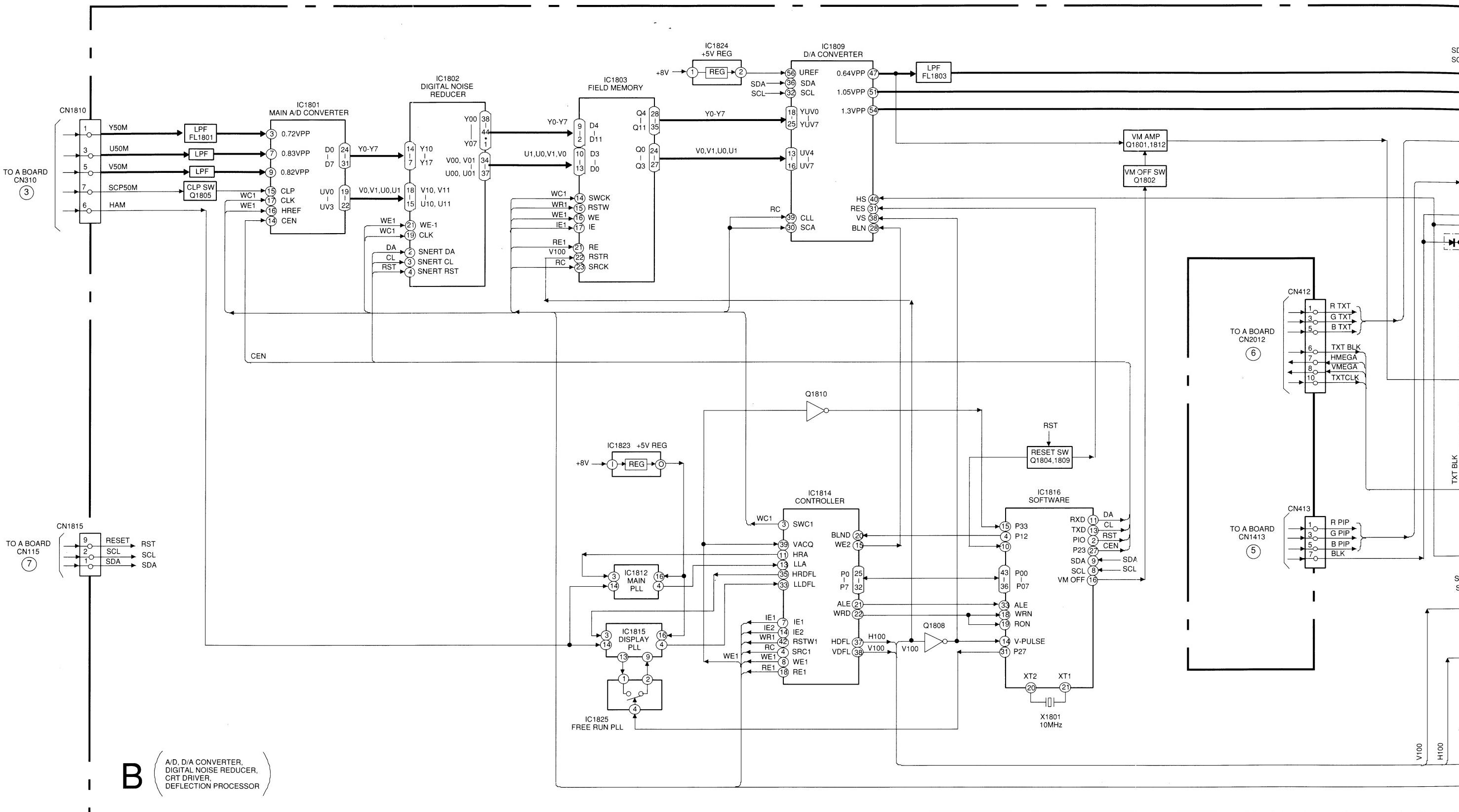
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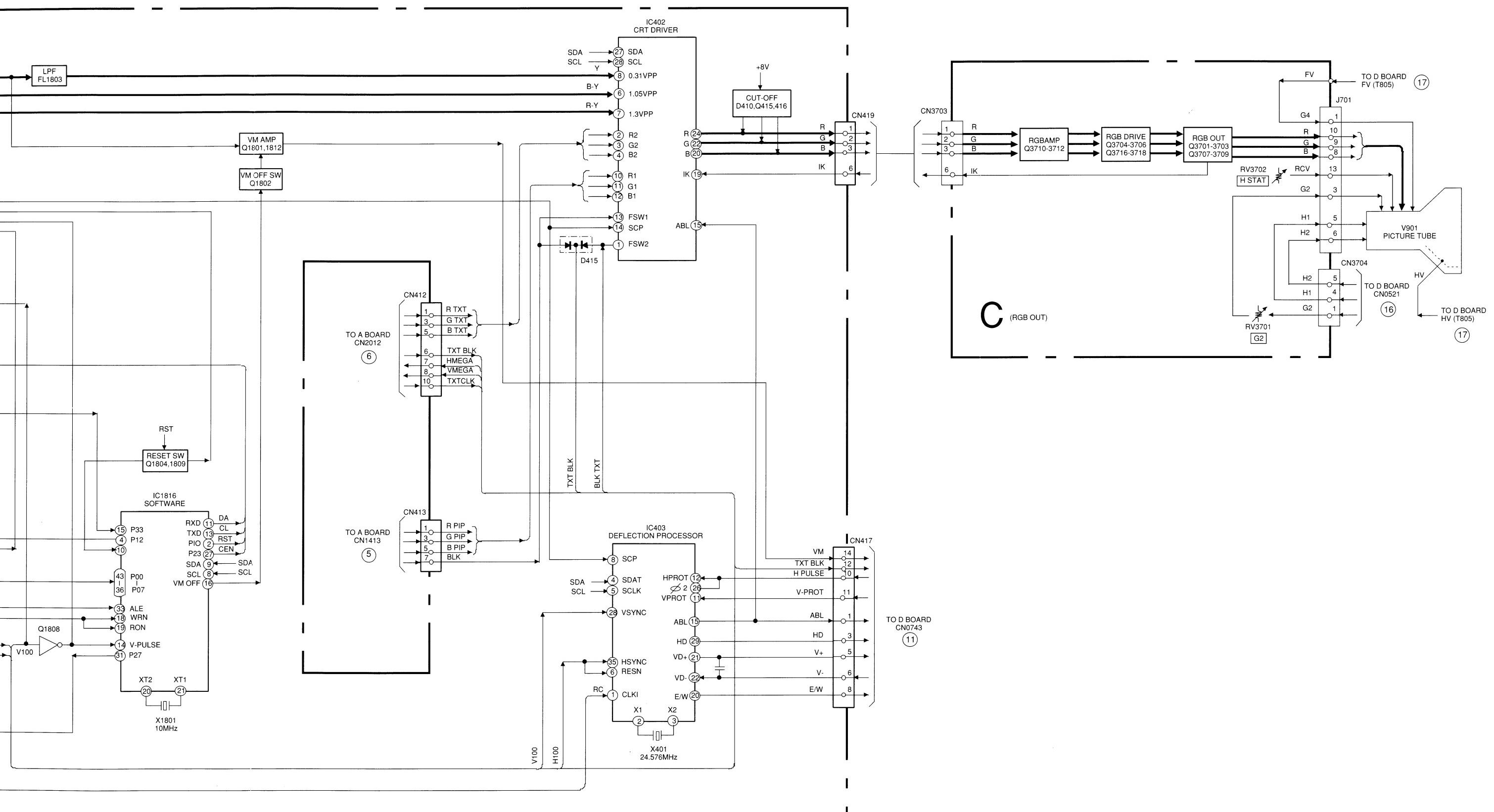


BLOCK DIAGRAM (2)

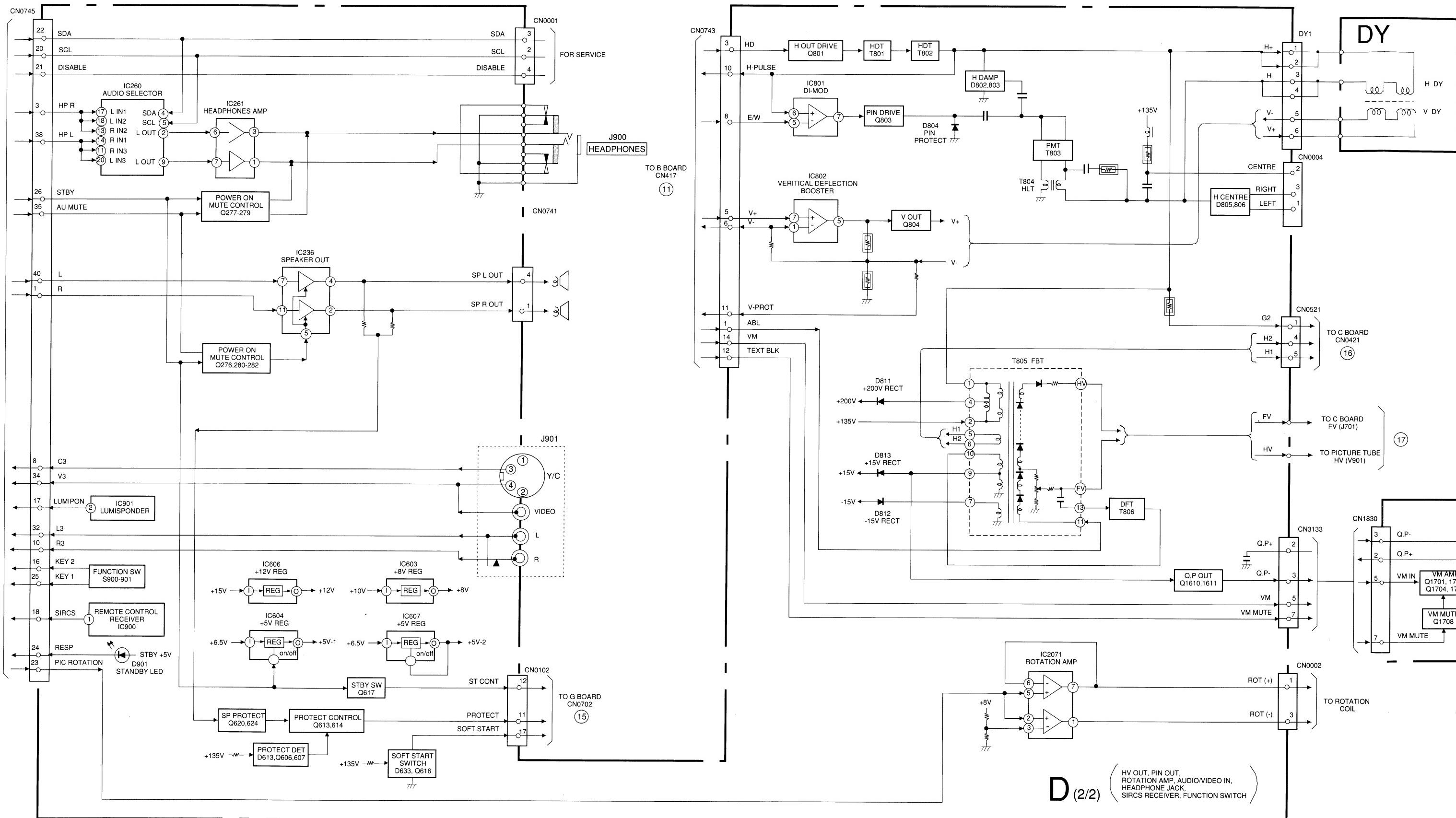


## BLOCK DIAGRAM (3)

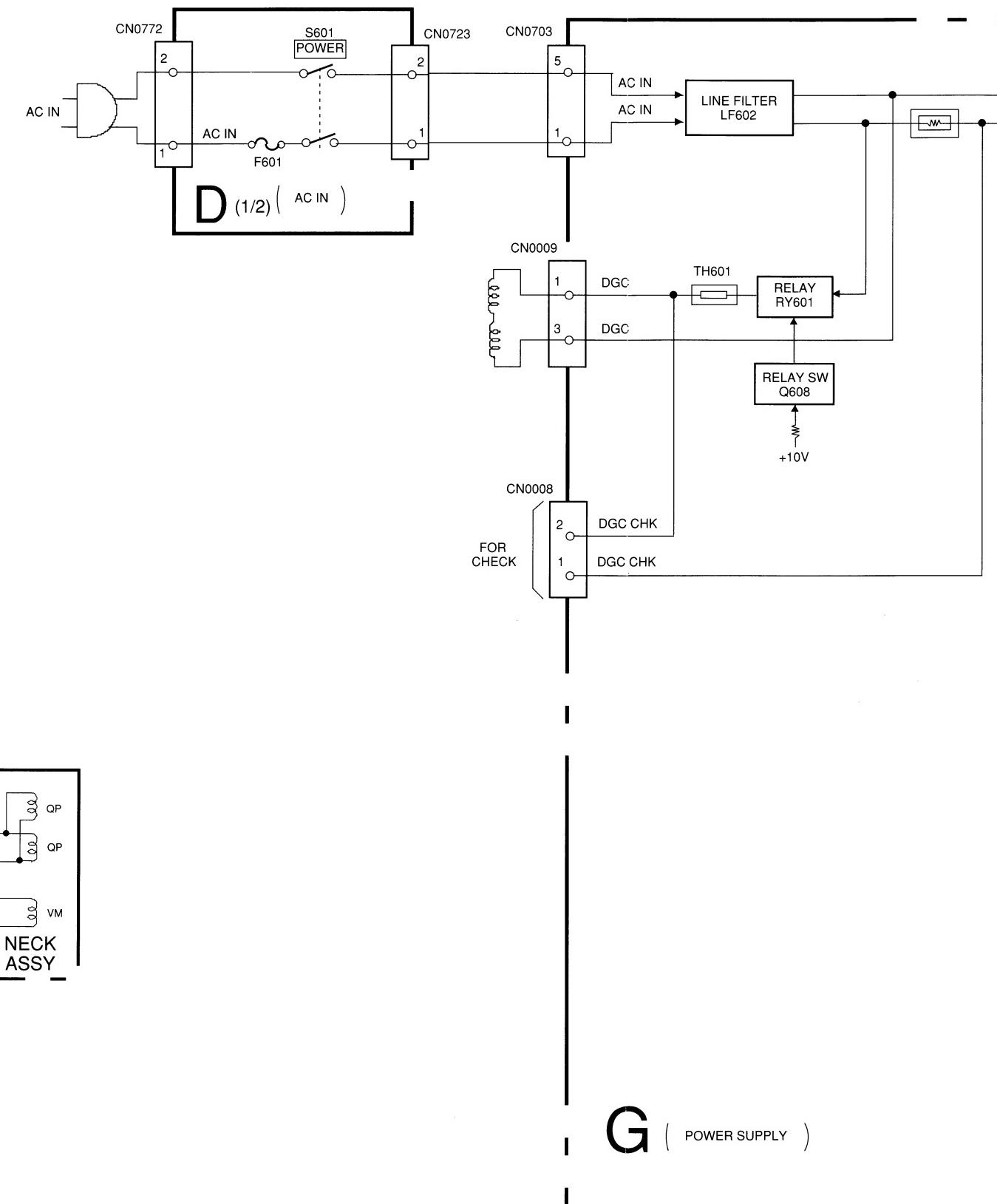
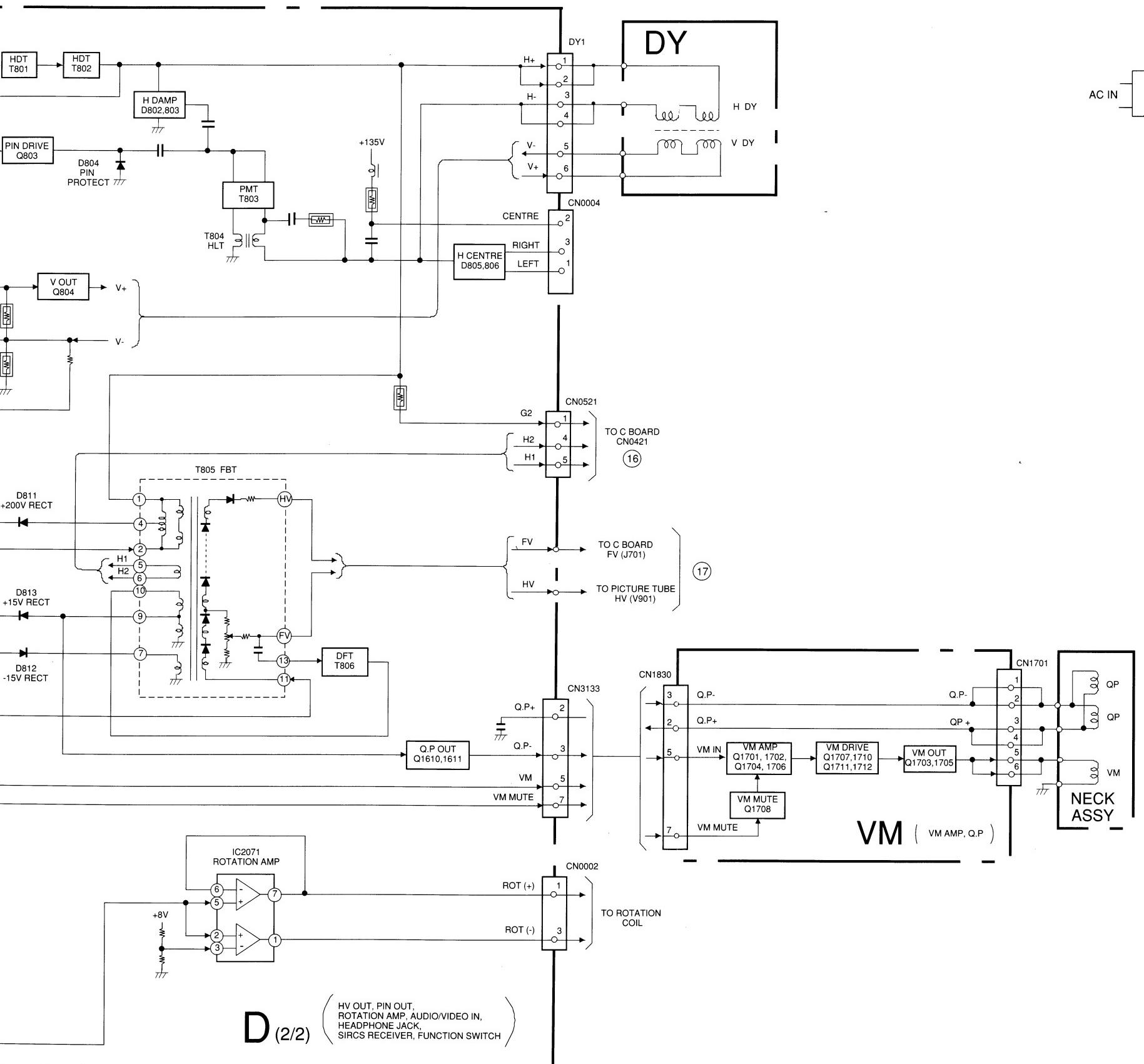




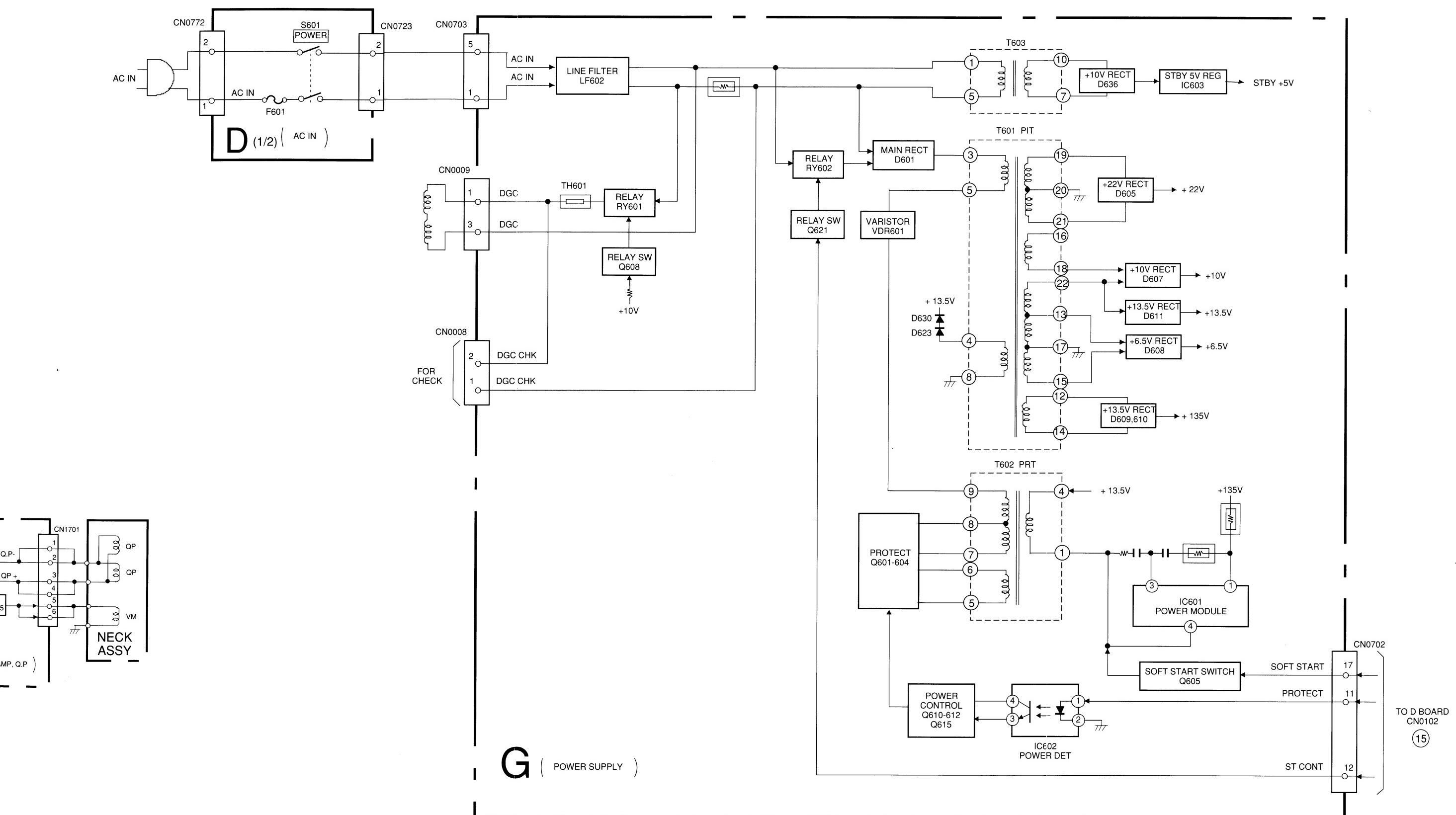
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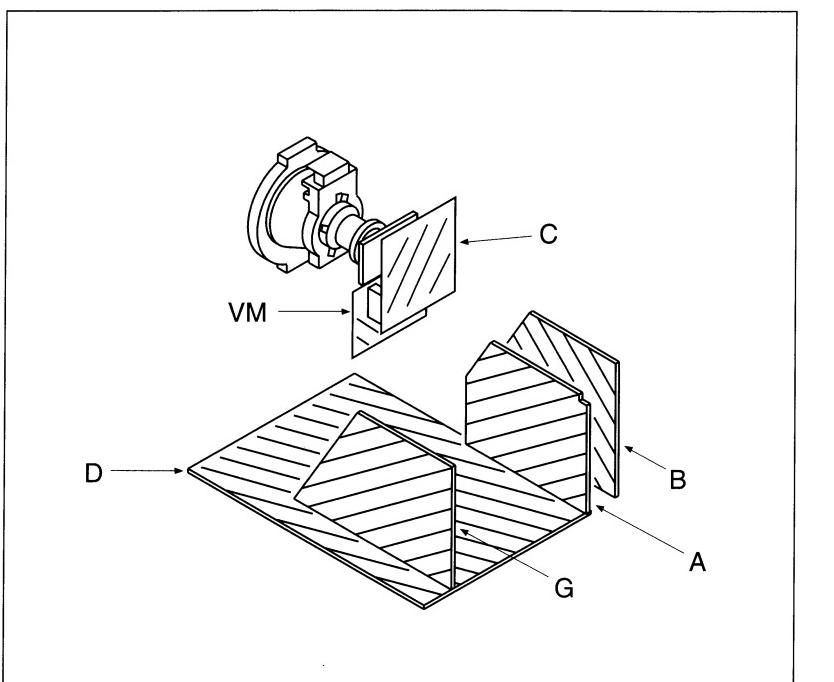
### BLOCK DIAGRAM (5)



### BLOCK DIAGRAM (5)



## 5-2. CIRCUIT BOARDS LOCATION



## **5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS**

**Note :**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\mu\text{F}$   
50WV or less are not indicated except for electrolytic and tantalums.
  - All resistors are in ohms.  
 $k = 1000$  ,  $M = 1000\text{K}$
  - Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm  
Rating electrical power  $\frac{1}{4}$  W

-  : nonflammable resistor.
  -  : internal component.
  -  : panel designation, or adjustment for repair.
  - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
  -  : earth - ground.
  -  : earth - chassis.
  -  : no mounted.

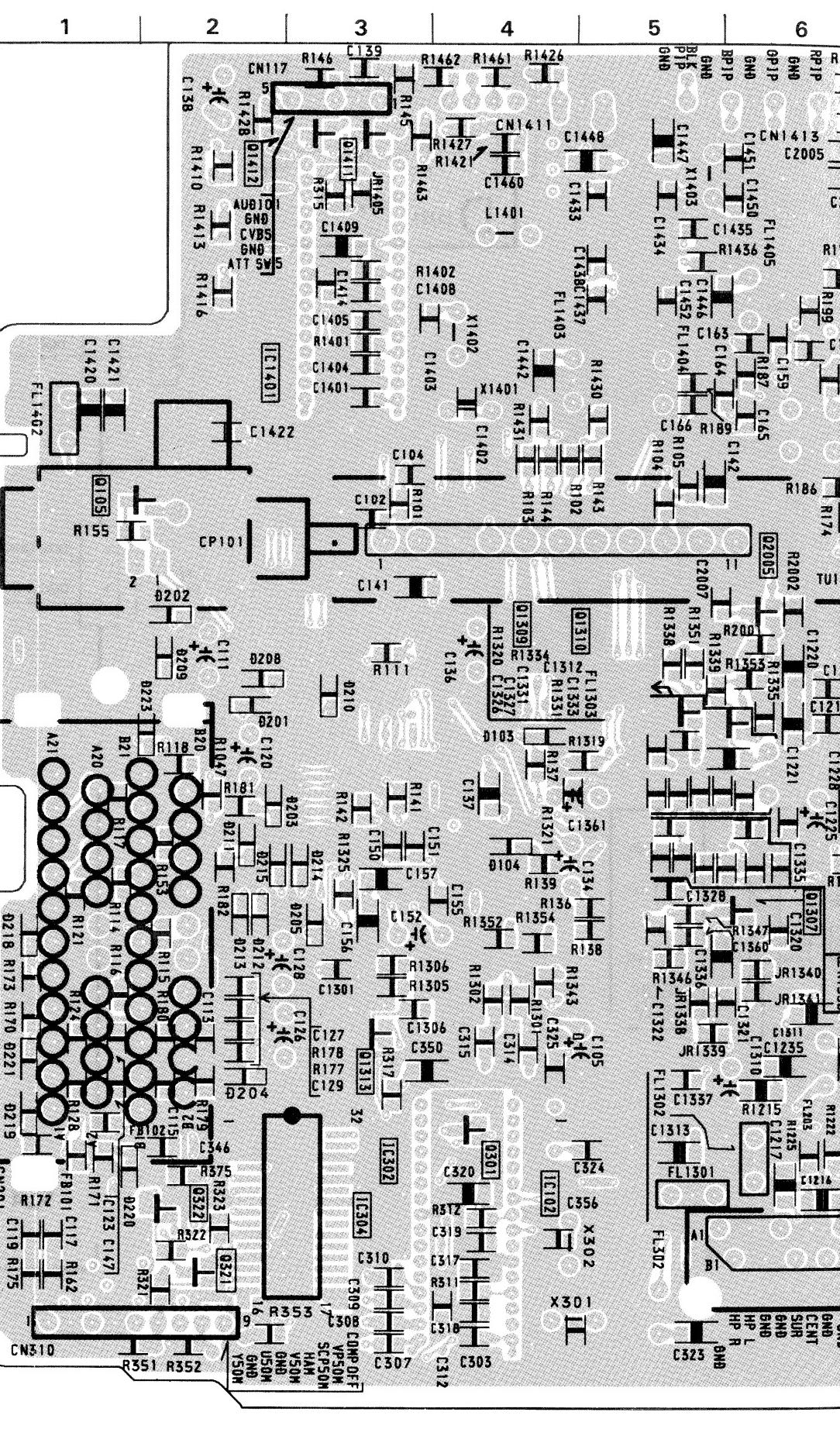
**Note :** The components identified by shading and marked  are critical for safety. Replace only with the part number specified.

**Note :** Les composants identifiés par une trame et une marque  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

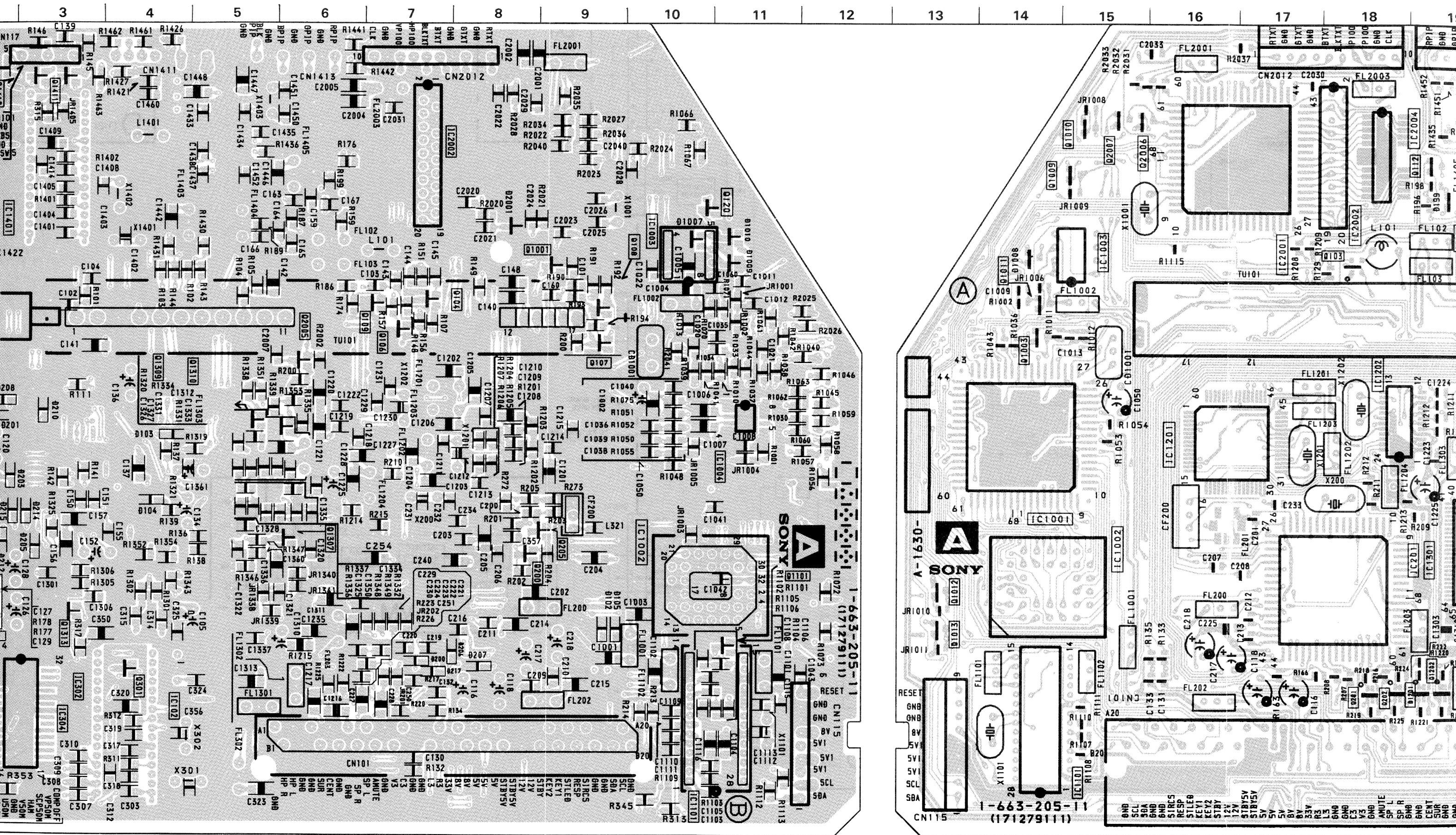
3D

IC	Q1404	B-21	
E-22	Q1411	A-3	A
H-4	Q1412	A-2	
C-19	Q2005	D-6	
G-19	Q2006	B-15	
H-3	Q2007	B-15	
I-22	DIODE		
F-14	D102	G-9	B
G-10	D103	E-4	
C-10	D104	F-4	
E-11	D105	G-9	
C-2	D199	C-19	C
B-21	D200	H-7	
C-17	D201	E-2	
NSISTOR	D202	D-2	
E-23	D203	F-3	
C-18	D204	H-2	D
D-8	D205	F-3	
D-7	D206	H-8	
D-9	D207	H-8	
C-10	D208	E-2	
D-7	D209	E-2	
E-22	D210	E-3	E
B-19	D211	F-2	
C-11	D212	G-2	
G-8	D213	G-2	
F-9	D214	F-3	F
H-4	D215	F-2	
I-22	D217	H-7	
H-23	D218	G-1	
I-24	D219	H-1	
I-24	D220	H-1	
H-22	D221	G-1	G
C-9	D223	E-2	
H-22	D301	H-22	
G-21	D1007	C-10	
G-22	D1008	C-14	
F-22	D1009	C-11	H
A-23	D1010	C-11	
B-23	D1405	B-21	
B-23	D2001	C-8	

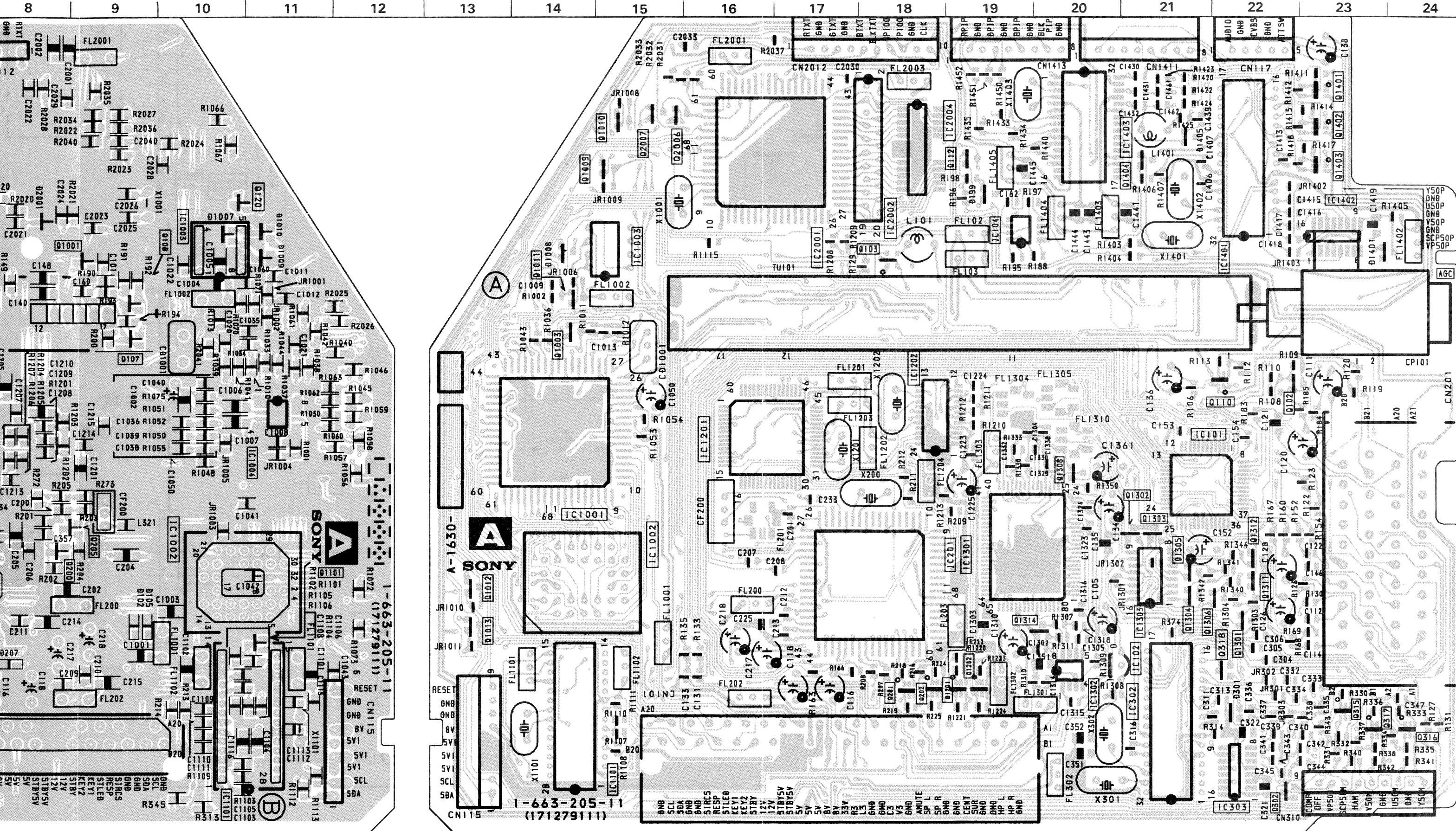
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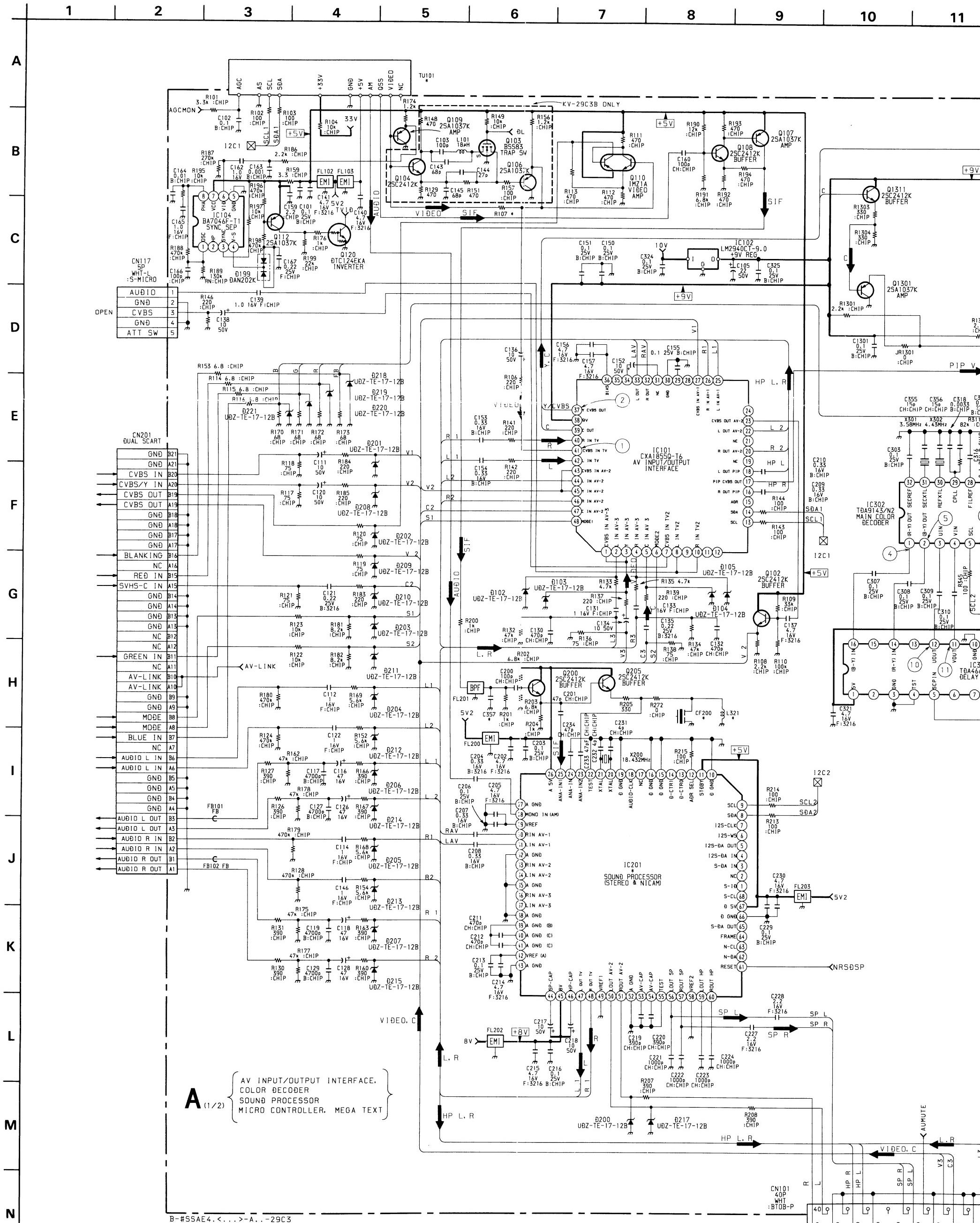


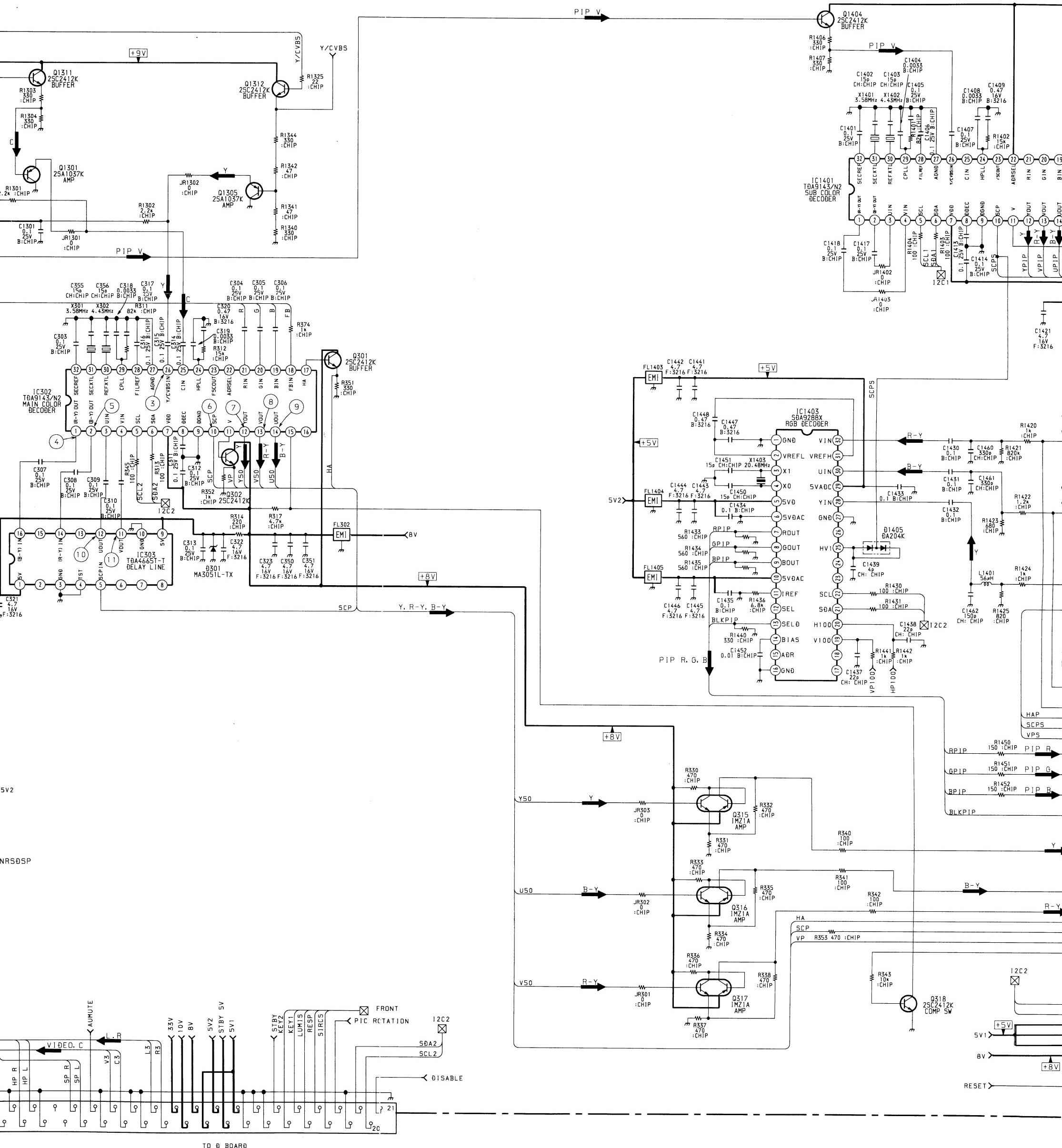
## A Board < Component Side >

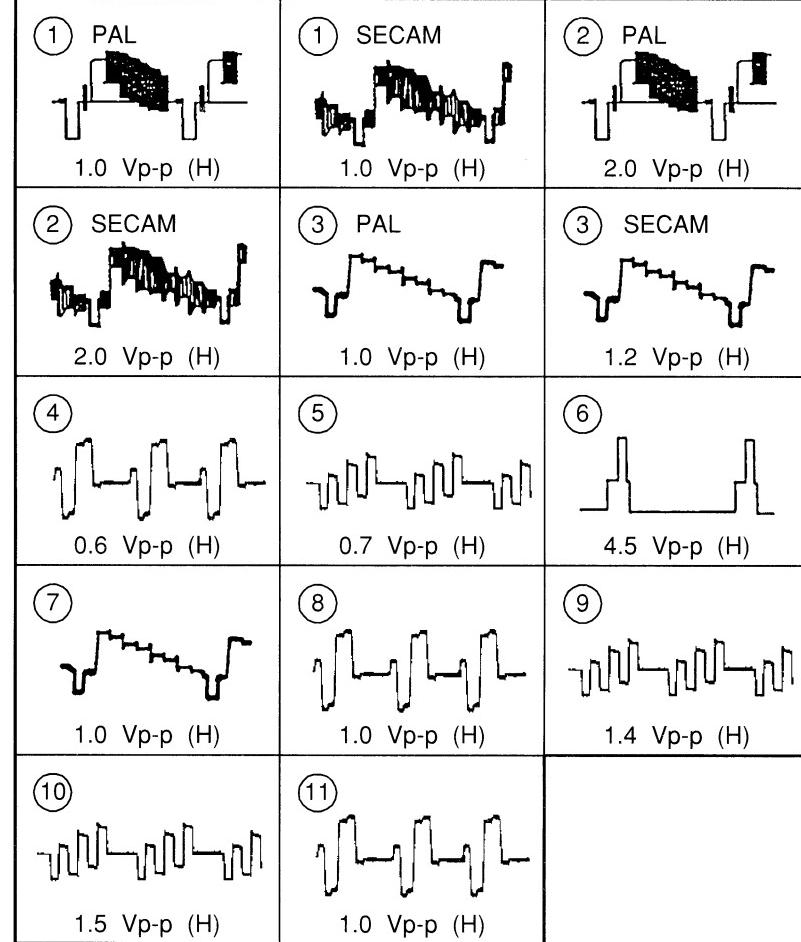
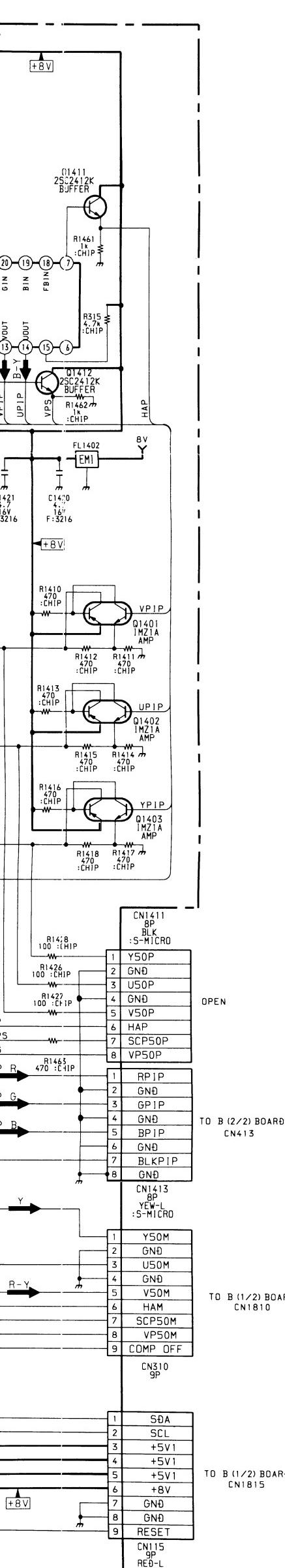


A Board < Component Side >









A (1/2) BOARD  
TRANSISTOR VOLTAGE TABLE

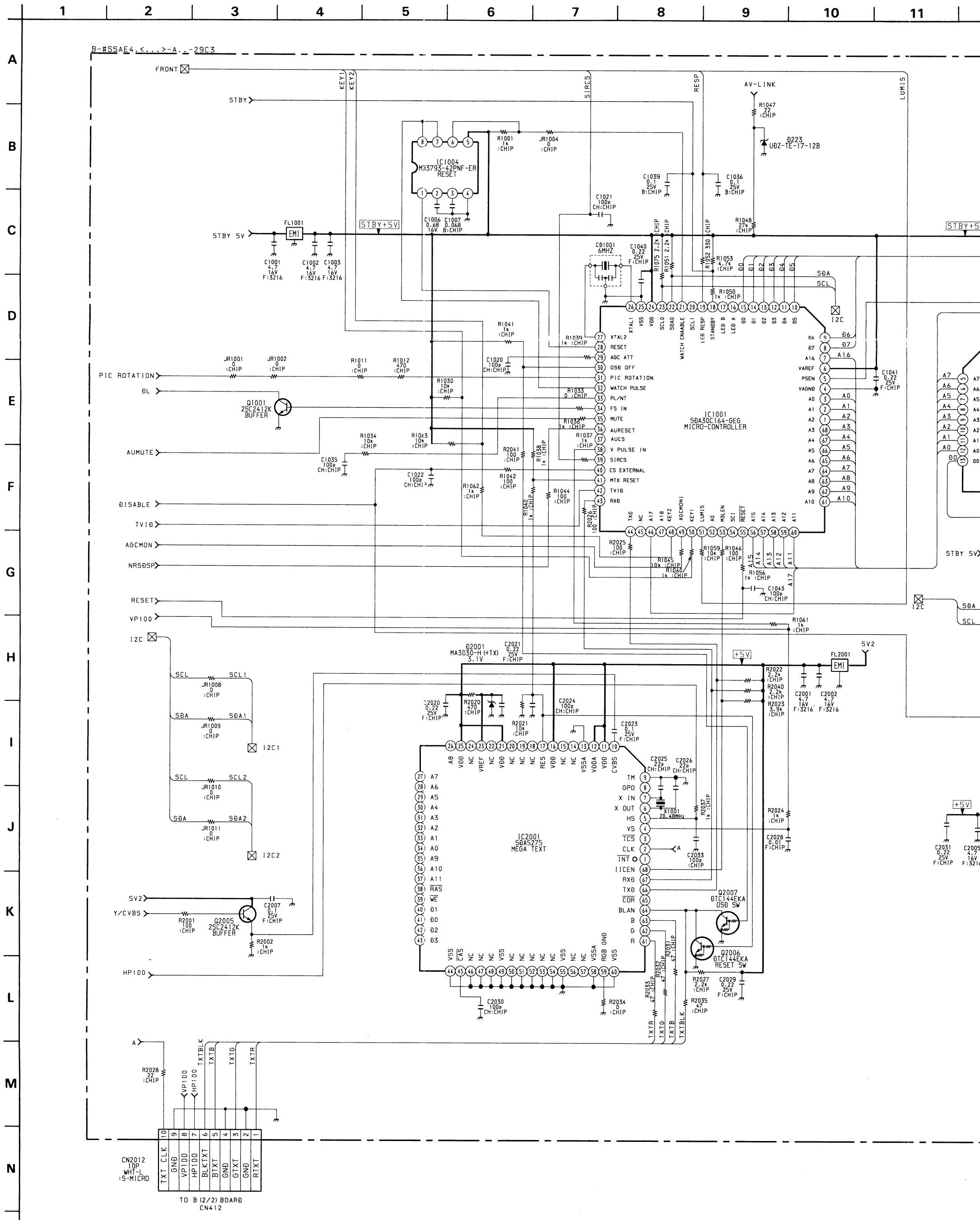
Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q102	1.9	4.7	1.3
Q105	0.08	4.5	0.08
Q107	4.4	1.7	5.0
Q108	1.8	4.4	1.2
Q112	4.3	4.9	5.0
Q120	4.6	0.1	0.1
Q301	0.5	8.0	0.4
Q302	-	8.0	0.3
Q318	0.1	5.2	0.1
Q1201	8.6	5.0	9.2
Q1202	0.7	5.0	9.2
Q1301	1.9	-	0.2
Q1302	-	-	0.6
Q1303	0.8	-	1.5
Q1304	2.2	-	0.1
Q1305	2.0	-	0.1
Q1306	1.7	-	-
Q1307	-	3.4	0.1
Q1308	3.5	4.7	2.9
Q1309	0.9	0.1	1.6
Q1310	1.0	0.1	1.6
Q1311	4.5	9.0	3.9
Q1312	4.5	9.0	-
Q1313	4.6	0.7	0.1
Q1314	4.8	4.7	4.3
Q1404	4.5	7.8	3.8
Q1411	0.5	8.0	0.6
Q1412	0.1	8.0	0.1
Q1201	2.6	8.6	2.1
Q1202	2.6	8.6	2.1

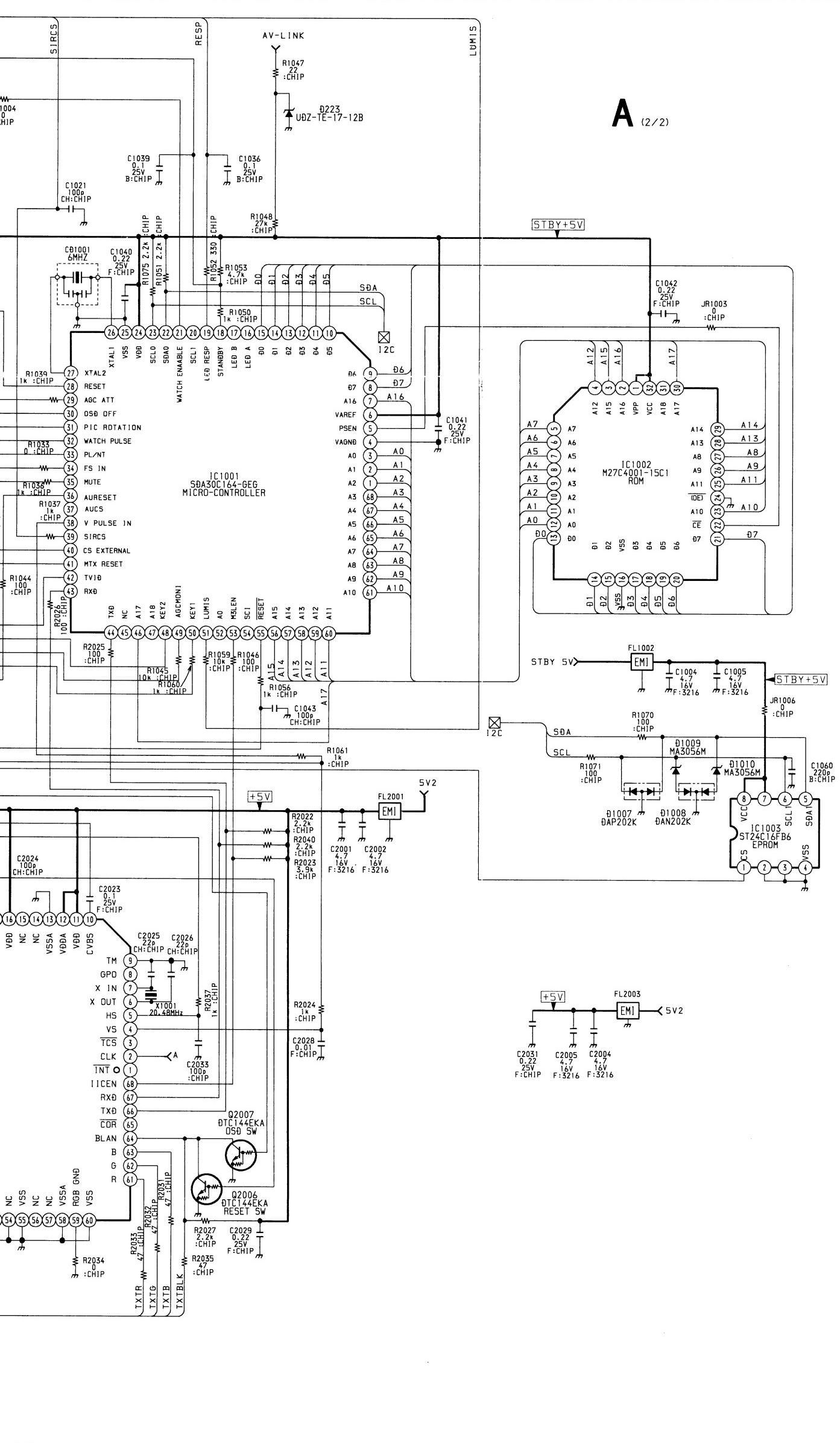
A (1/2) BOARD IC VOLTAGE TABLE

IC Voltage Table					
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC201	4	0.5		4	4.7
	5-6	4.7		13	4.7
	7	2.4		31	4.7
	8-9	4.7		35	4.7
	20	2.4		37	2.7
	24	4.4		39	2.2
	25	8.8		40	2.7
	26	4.4		41	4.7
	28	3.8		45	4.8
	29	2.7		29	2.7
	30-31	3.8		30-31	3.8
	39-42	3.8		39-42	3.8
	44	6.2		44	6.2
	45	8.0		45	8.0
	46	7.0		1	5.0
	47-48	3.8		5	0.6
	50-51	3.7		11-12	3.0
	53-54	3.8		14	1.4
	56-57	1.2		16	1.2
	61	4.8		1-2	2.0
IC303	1-2	2.0		3-4	2.4
	3-4	2.4		5	3.5
	5	3.0		6	4.0
	6	4.0		7	7.8
	7	8.0		8	5.0
	8	5.0		10	0.8
	10	0.5		12	2.4
	12	3.2		13-14	2.6
	13-14	2.6		15	8.0
	15	8.0		17	0.3
	17	0.3		22	7.8
	19	1.6		24	3.6
	21	1.0		26	3.3
	23-24	4.0		28	3.5
	26	3.7		29	4.3
	28	3.5		30	2.6
	29	5.0		31	2.6
	30	2.5		32	3.8
IC1401	31	2.5			
	32	2.0			

A BOARD \* MARK

Model Ref. No.	29C3A	29C3B	29C3D	29C3E	29C3K	29C3R
C357	39PF	39PF	39PF	—	39PF	39PF
CF200	6.5MHz	6.5MHz	6.5MHz	—	6.5MHz	6.5MHz
IC201	MSP3400C-PP-C6-T-ND	MSP34103-PS-F7-T-ND	MSP3400C-PP-C6-T-ND	MSP3410B-PS-F7-T-ND	MSP3400C-PP-C6-T-ND	MSP3400C-PP-C6-T-ND
L321	10UH	10UH	10UH	—	10UH	10UH
TU101	TUVIF (AEP)	TUVIF (FR)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)



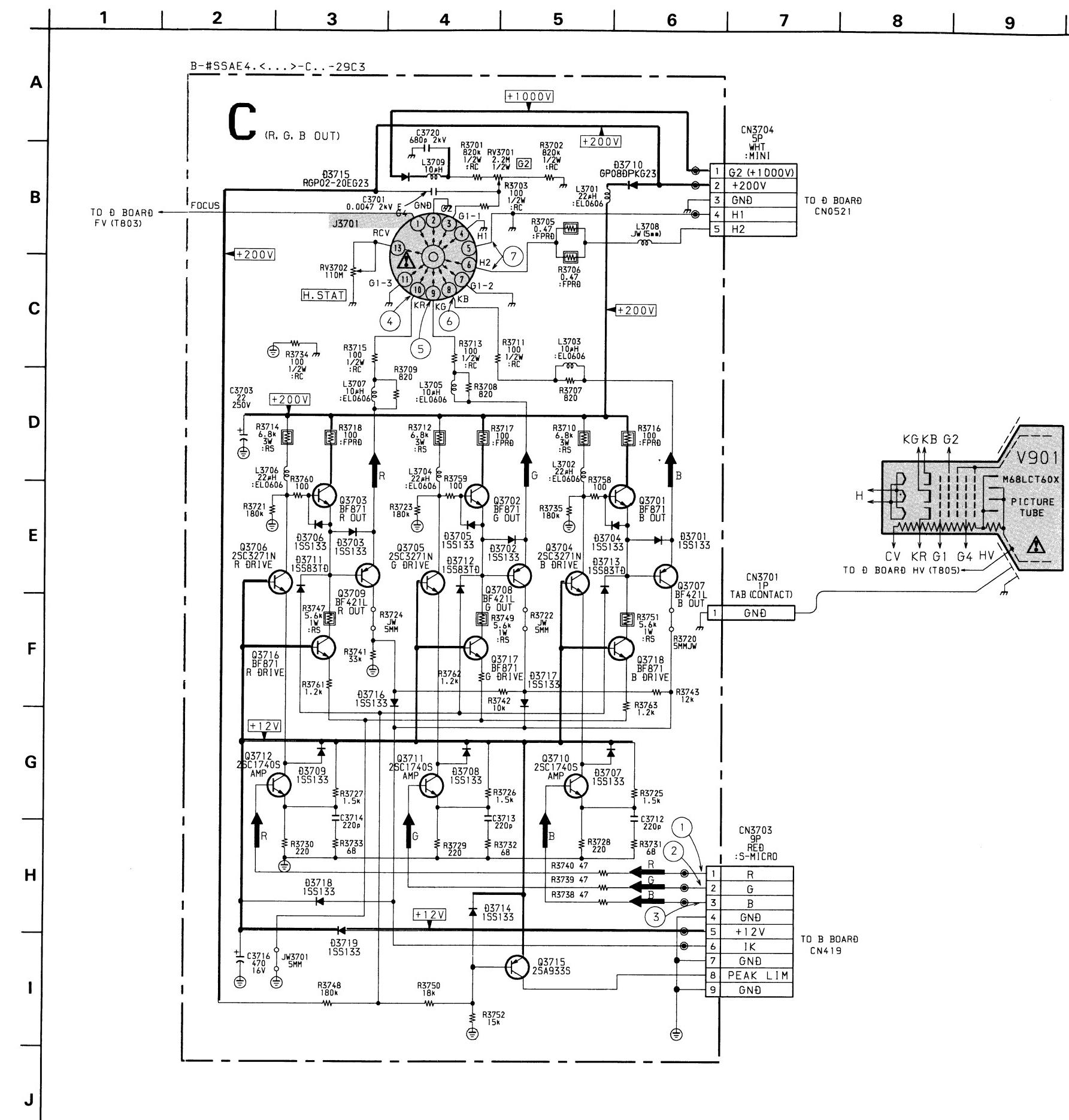
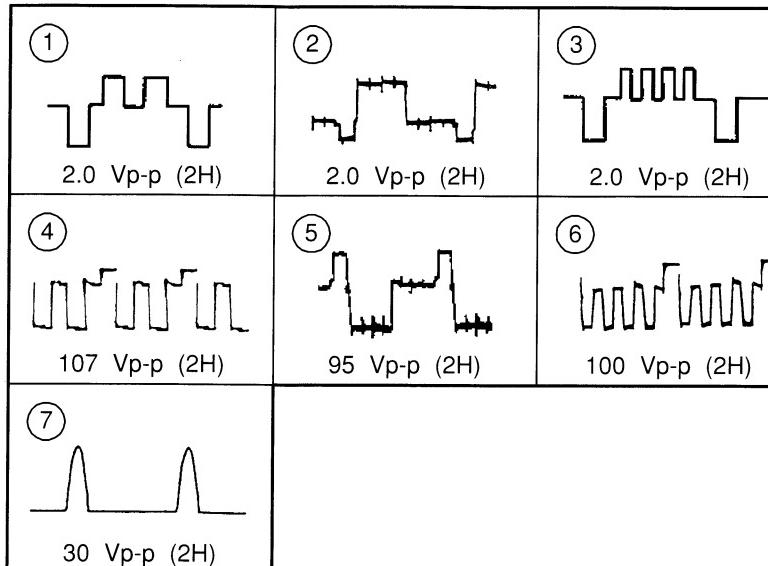
**A (2/2) BOARD IC VOLTAGE TABLE**

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC101	1-5	4.6
	7-8	4.6
	10	4.6
	17	4.6
	23	4.6
	29	4.6
	31	4.6
	34	4.6
	36	4.6
	38	9.0
IC1101	40-47	4.6
	5	2.4
	6	4.8
	19	3.6
	20	0.1
	24	4.8
	26	2.1
	27	2.3
	28	4.6
	30	0.1
IC2001	31-32	2.4
	33	4.8
	36	4.1
	38	0.1
	39	0.6
	40	4.8
	41	0.1
	42	4.8
	43	4.4
	44	4.1
IC2001	48	4.8
	49	2.2
	50	4.8
	52	4.8
	54	4.8
	56	4.8
	58	4.8
	60	4.8
	62	4.8
	64	4.8

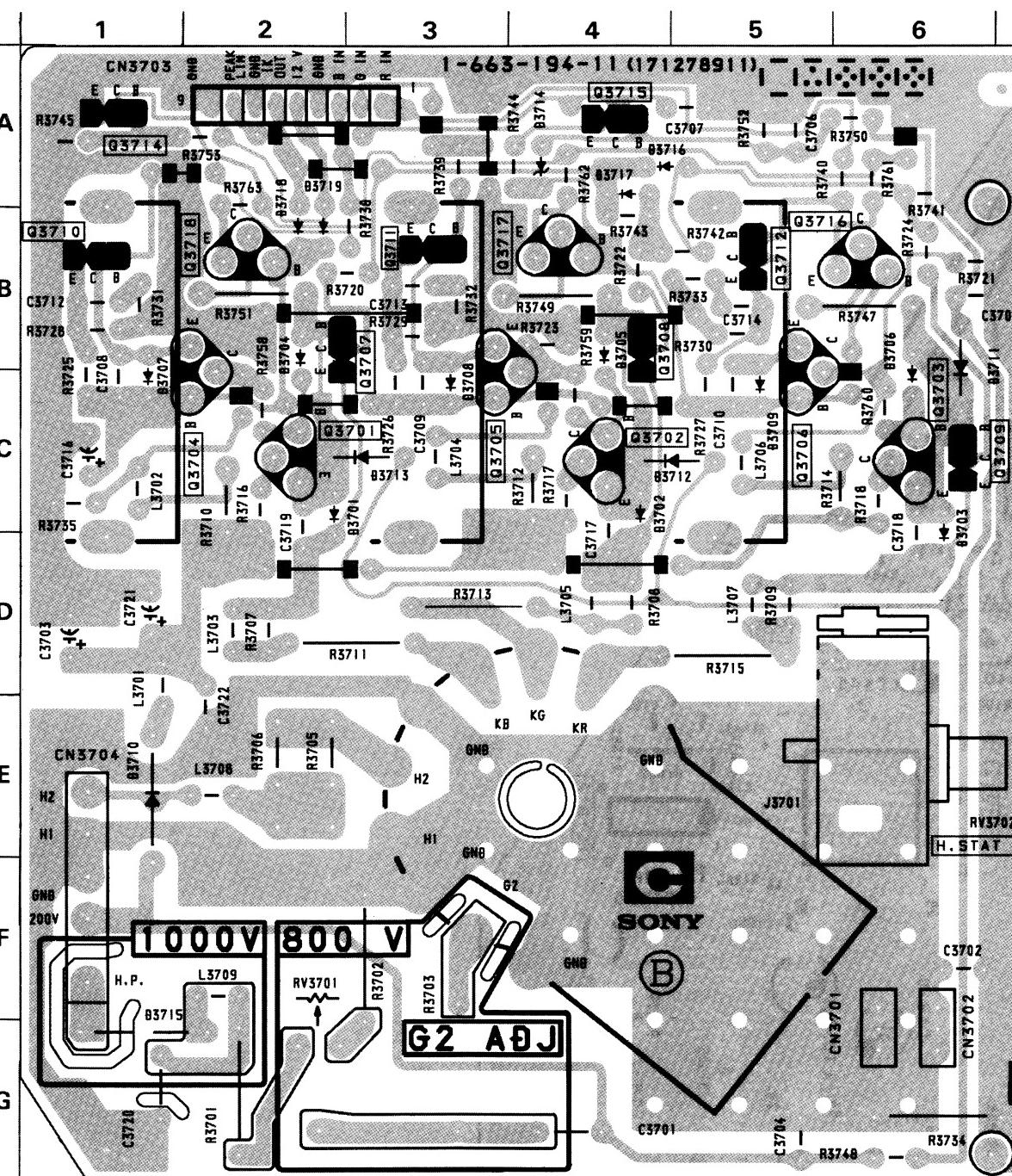
**A (2/2) BOARD TRANSISTOR VOLTAGE TABLE**

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q1001	0.1	0.7	0.1
Q1004	0.1	0.7	-
Q1101	3.3	5.0	2.6

### **WAVEFORMS C BOAR**



## C Board



## C BOARD

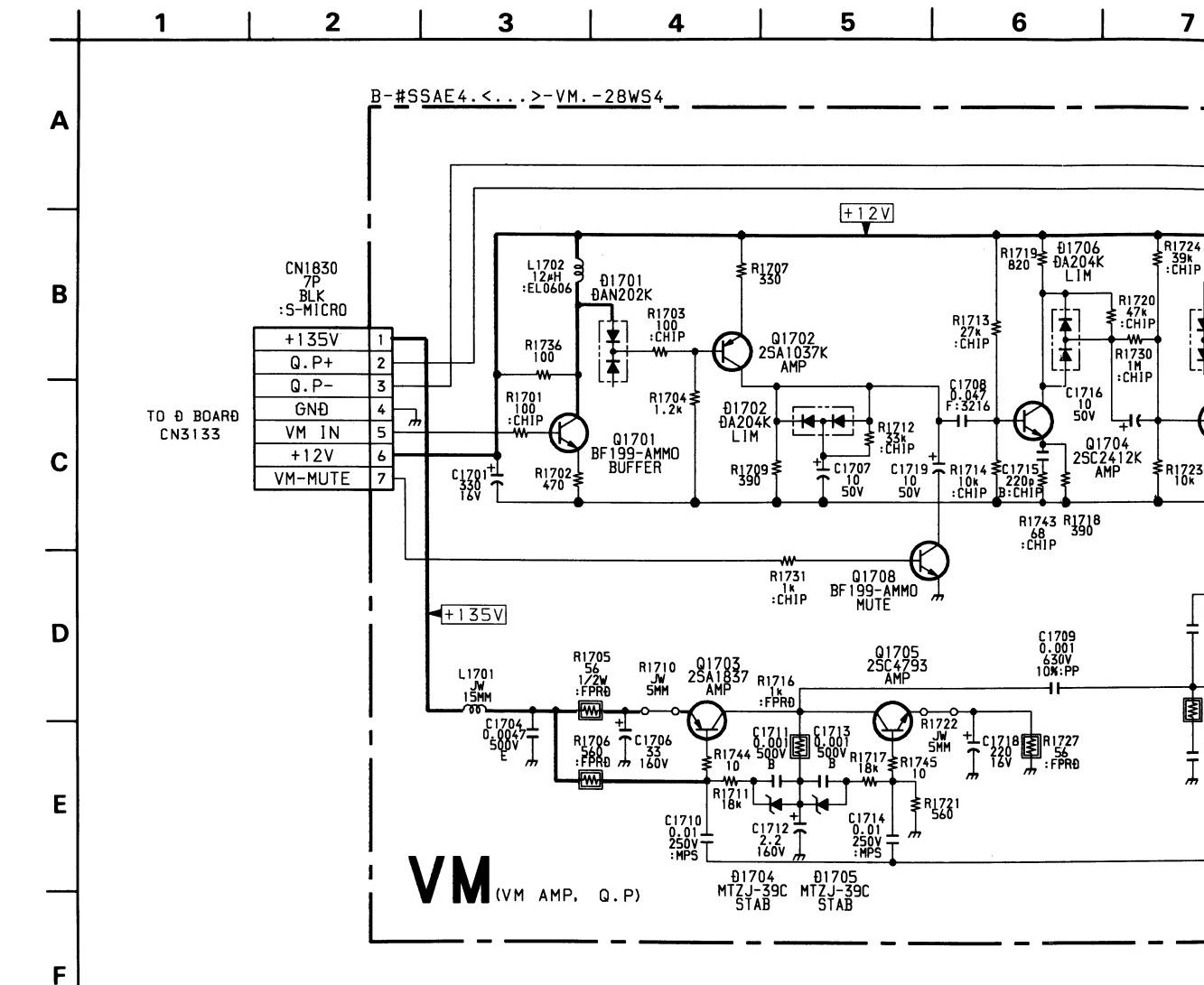
TRANSISTOR			
Q3701	C-2		
Q3702	C-4		
Q3703	C-6		
Q3704	C-2		
Q3705	C-3		
Q3706	C-5		
Q3707	B-3		
Q3708	B-4		
Q3709	C-6		
Q3710	B-1		
Q3711	B-3		
Q3712	B-5		
Q3713	A-4		
Q3714	B-6		
Q3715	B-4		
Q3716	B-2		

DIODE			
D3701	C-2		
D3702	C-4		
D3703	D-6		
D3704	B-2		
D3705	B-4		
D3706	B-6		
D3707	C-1		
D3708	C-3		
D3709	C-5		
D3710	E-1		
D3711	B-6		
D3712	C-5		
D3713	C-3		
D3714	A-4		
D3715	G-1		
D3716	A-5		
D3717	A-4		
D3718	A-2		
D3719	A-2		

VARIABLE RESISTOR			
RV3701	F-2		
RV3702	E-6		



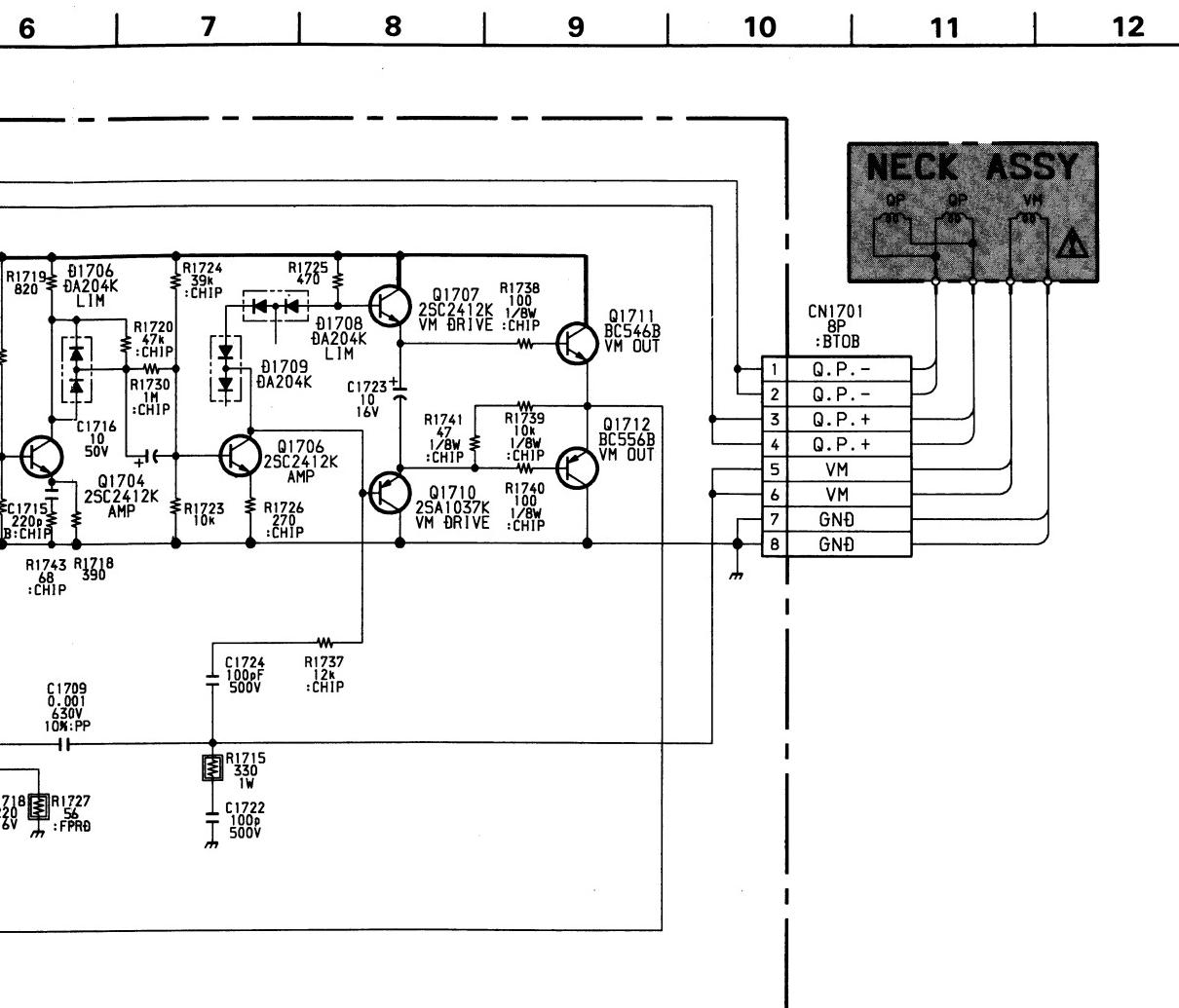
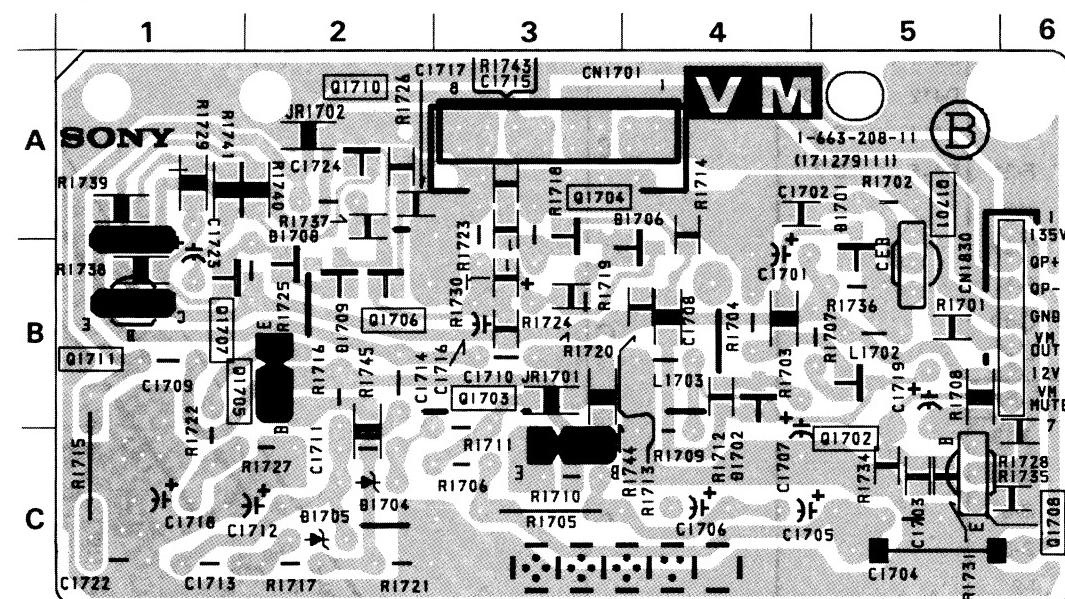
VM  
VM BOARD  
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q1701	0.8	0.7	2.1
Q1702	1.8	0.2	1.9
Q1703	24.0	13.3	24.0
Q1704	0.5	1.2	0.4
Q1705	0.1	12.3	-
Q1706	0.4	1.1	0.3
Q1707	1.5	2.1	1.4
Q1708	-	-	-
Q1710	1.1	-	1.2
Q1711	1.4	2.1	1.3
Q1712	1.3	1.2	-

VM

[VM OUT, Q.P.]

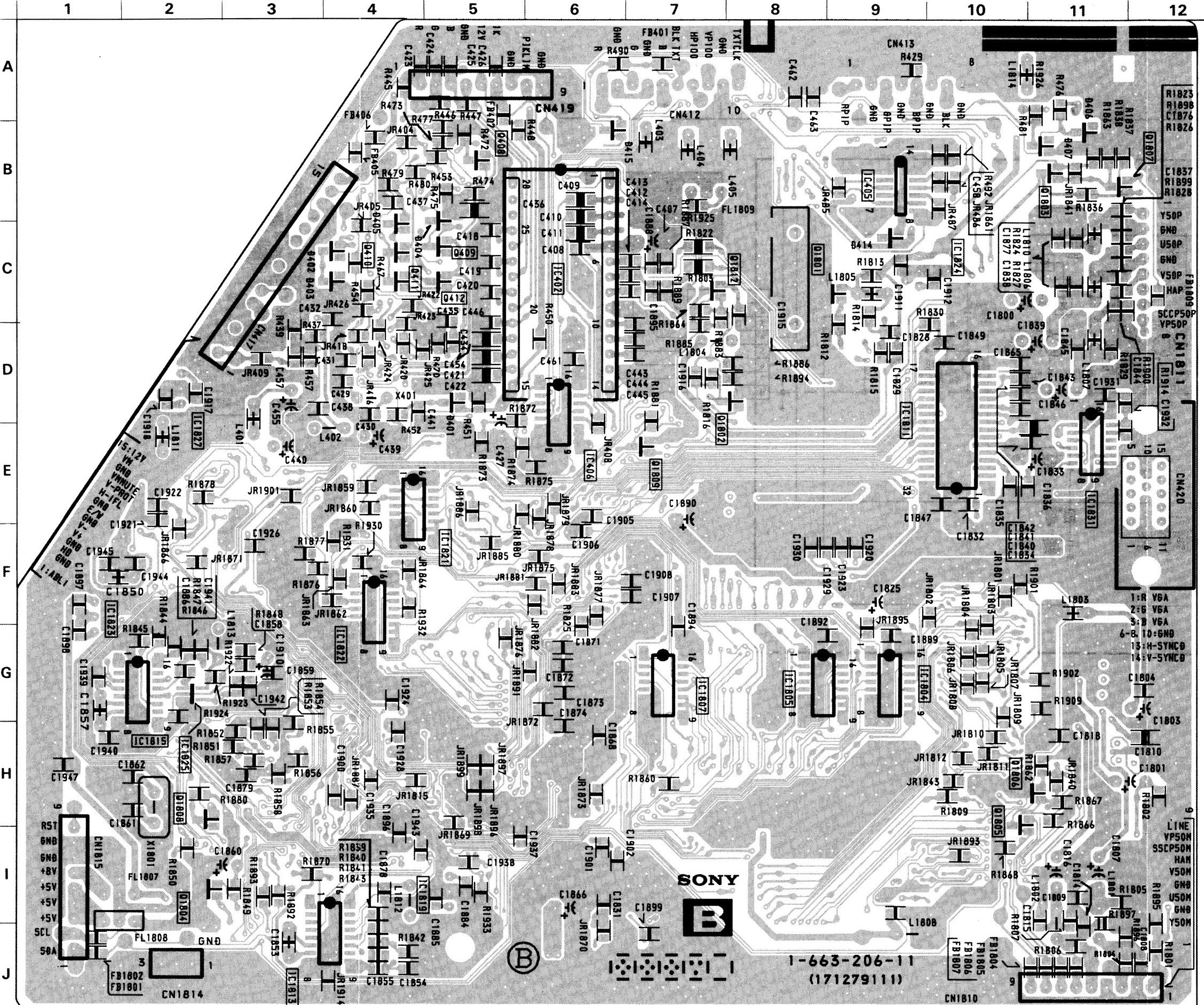
## VM Board

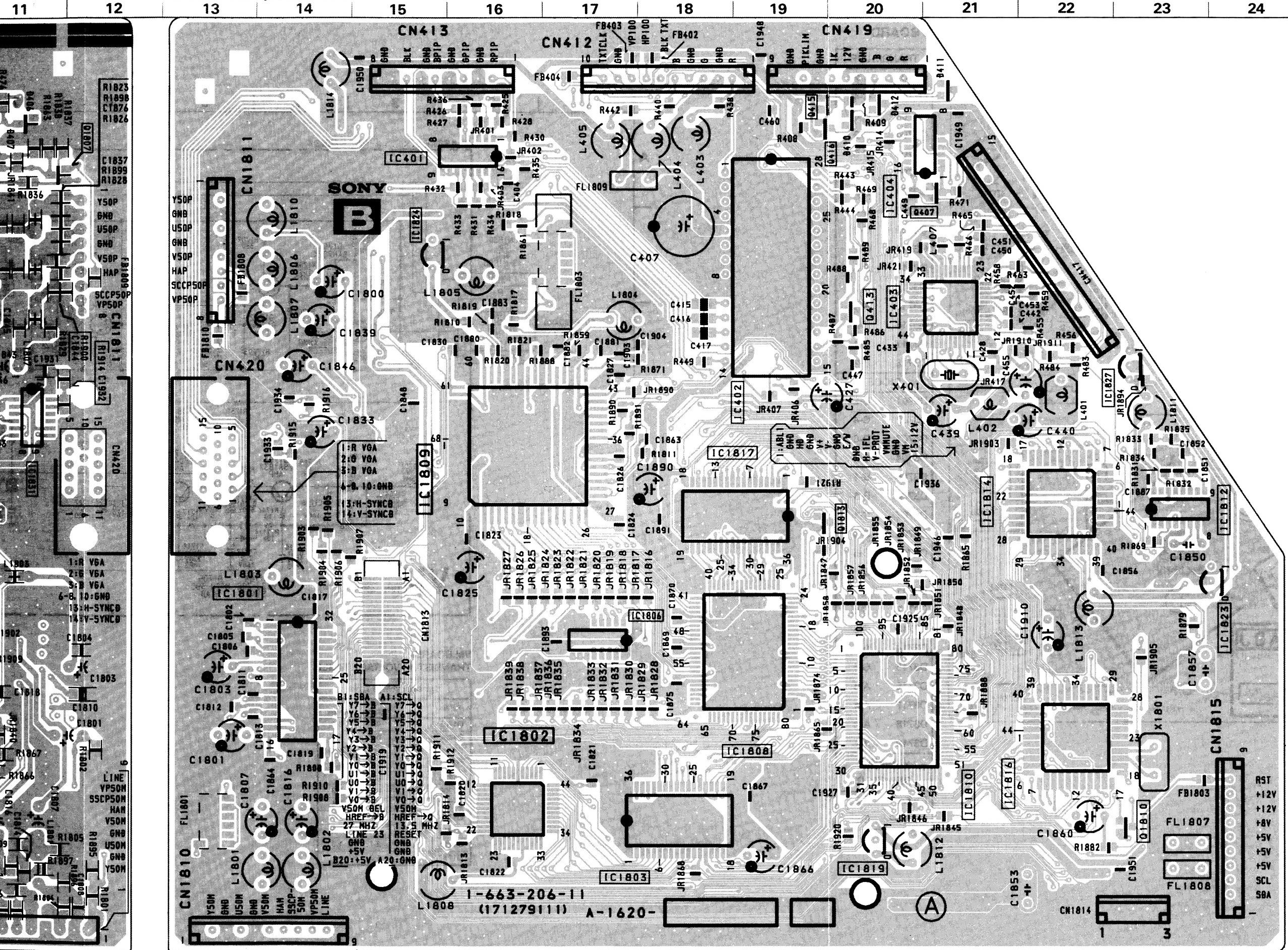


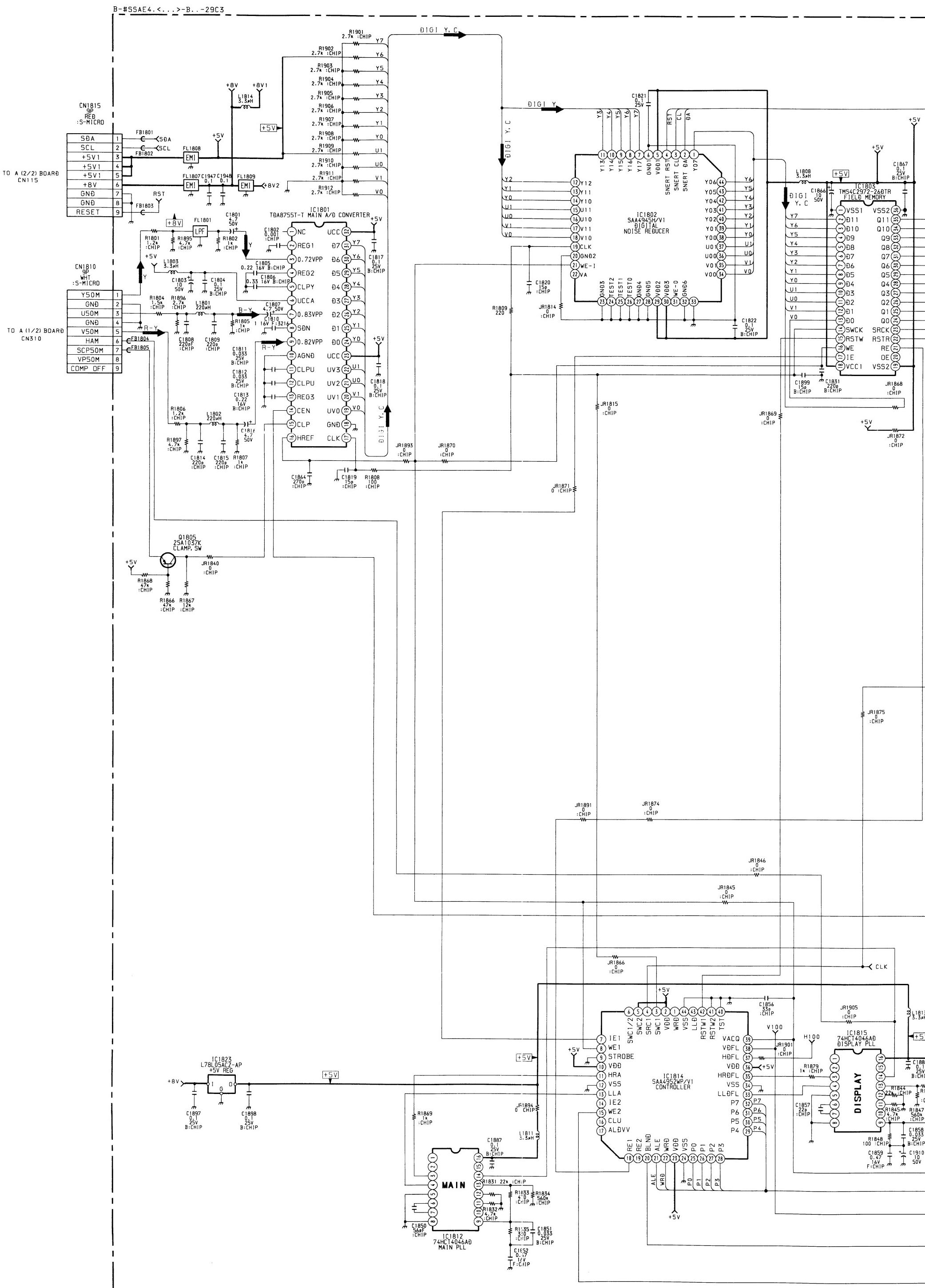
## B BOARD

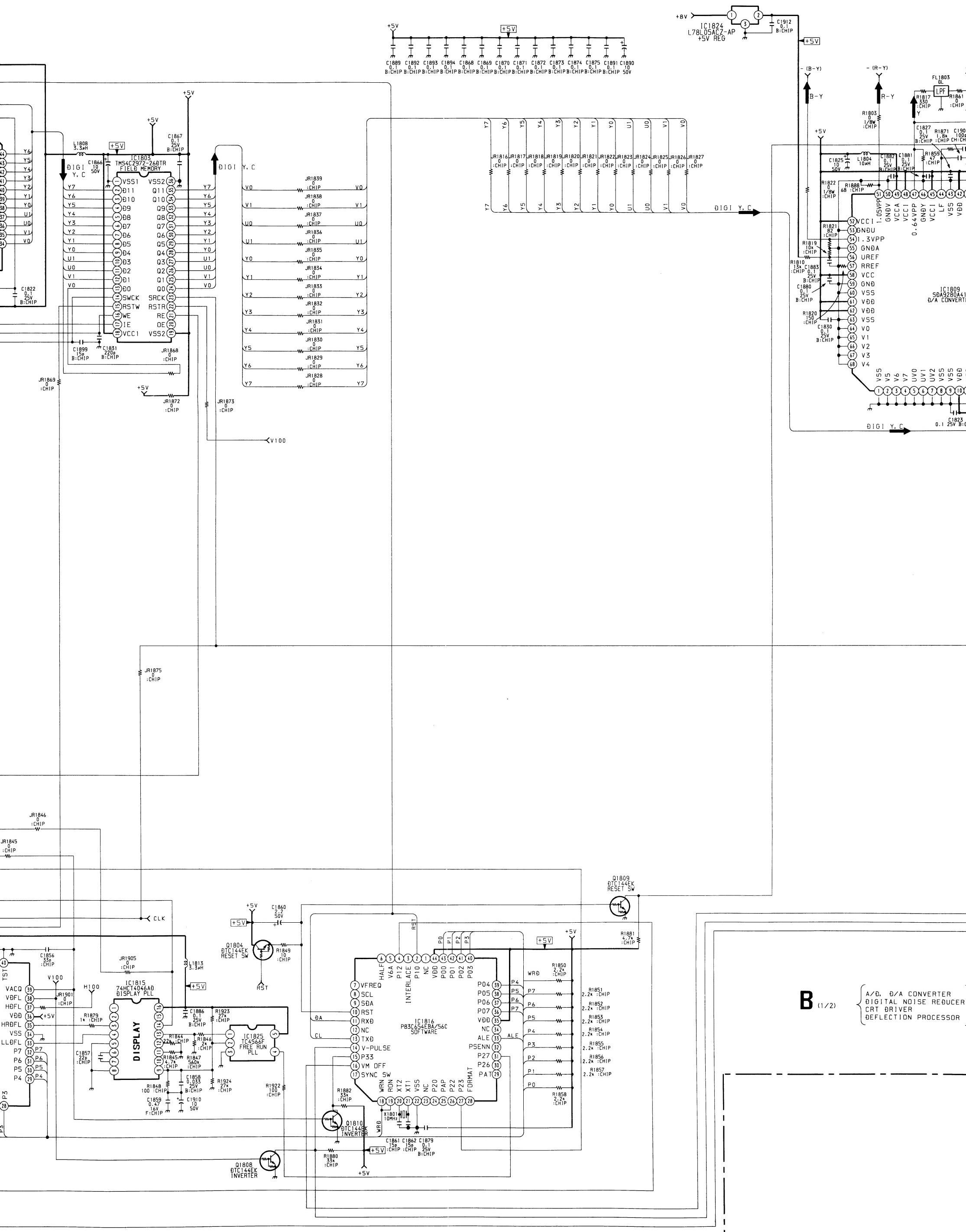
IC	DIODE	IC	DIODE
IC402	C-6	D401	D-5
IC403	D-20	D402	C-3
IC1801	G-13	D403	C-3
IC1802	H-16	D410	B-20
IC1803	I-17	D411	A-21
IC1809	E-15	D412	A-20
IC1812	F-24	D414	C-9
IC1814	F-21	D415	B-7
<b>TRANSISTOR</b>			
Q415	A-19		
Q416	B-20		
Q1801	C-8		
Q1802	D-8		
Q1804	I-2		
Q1805	H-10		
Q1808	H-2		
Q1809	E-7		
Q1810	I-23		
Q1812	C-8		

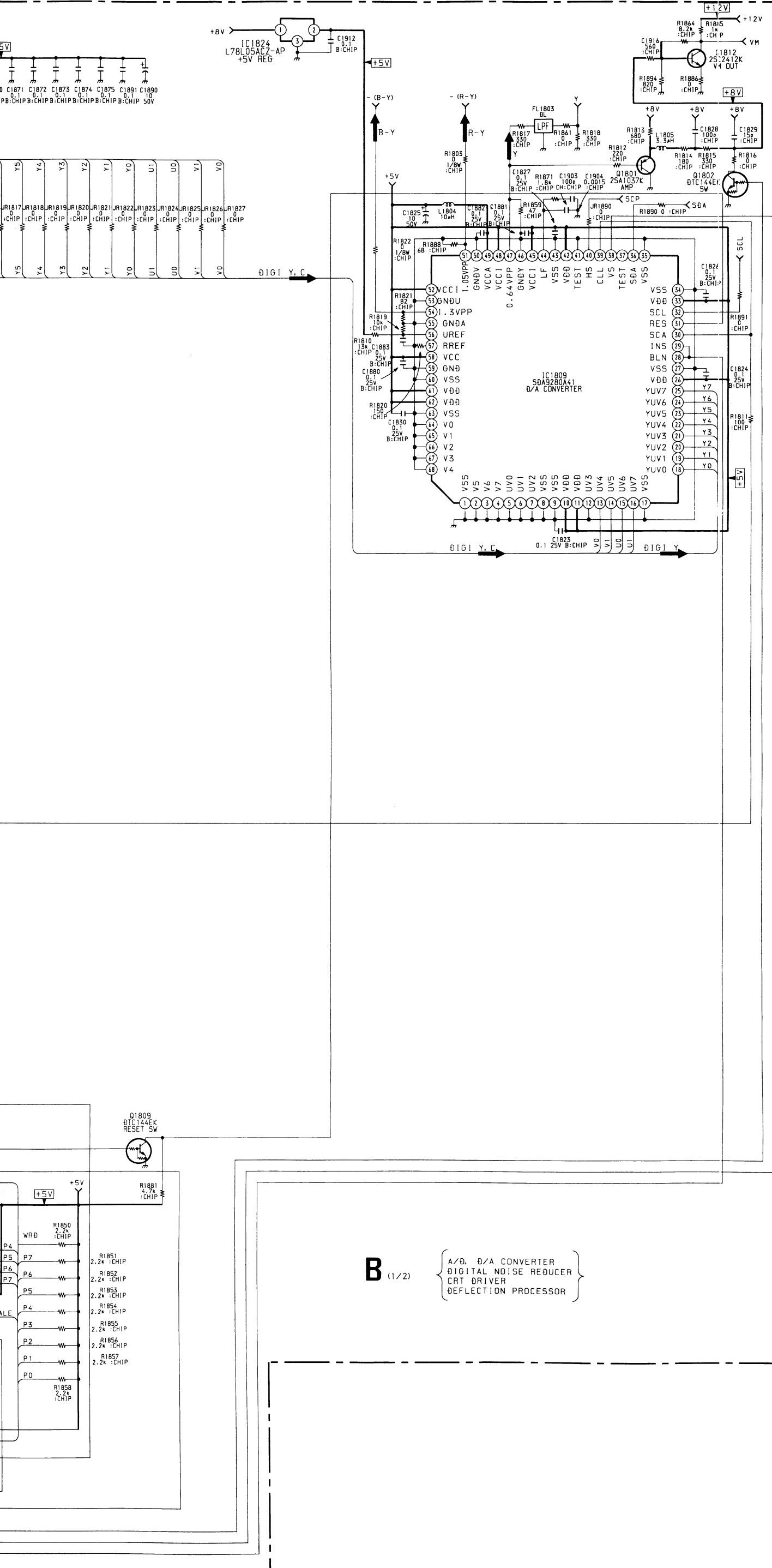
## B Board &lt; Conductor Side &gt;











**B BOARD  
TRANSISTOR VOLTAGE TABLE**

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q411	0.1	4.8	4.8
Q412	0.1	4.8	4.8
Q415	1.8	0.1	-
Q416	0.1	5.6	-
Q1801	0.1	-	0.9
Q1802	4.0	0.1	0.1
Q1804	0.3	4.8	0.1
Q1805	2.5	1.3	0.7
Q1807	2.5	1.3	0.7
Q1808	0.1	4.7	0.1
Q1809	0.1	0.1	0.1
Q1810	0.1	4.8	-
Q1812	0.5	10.5	-
Q1813	0.1	3.7	0.1

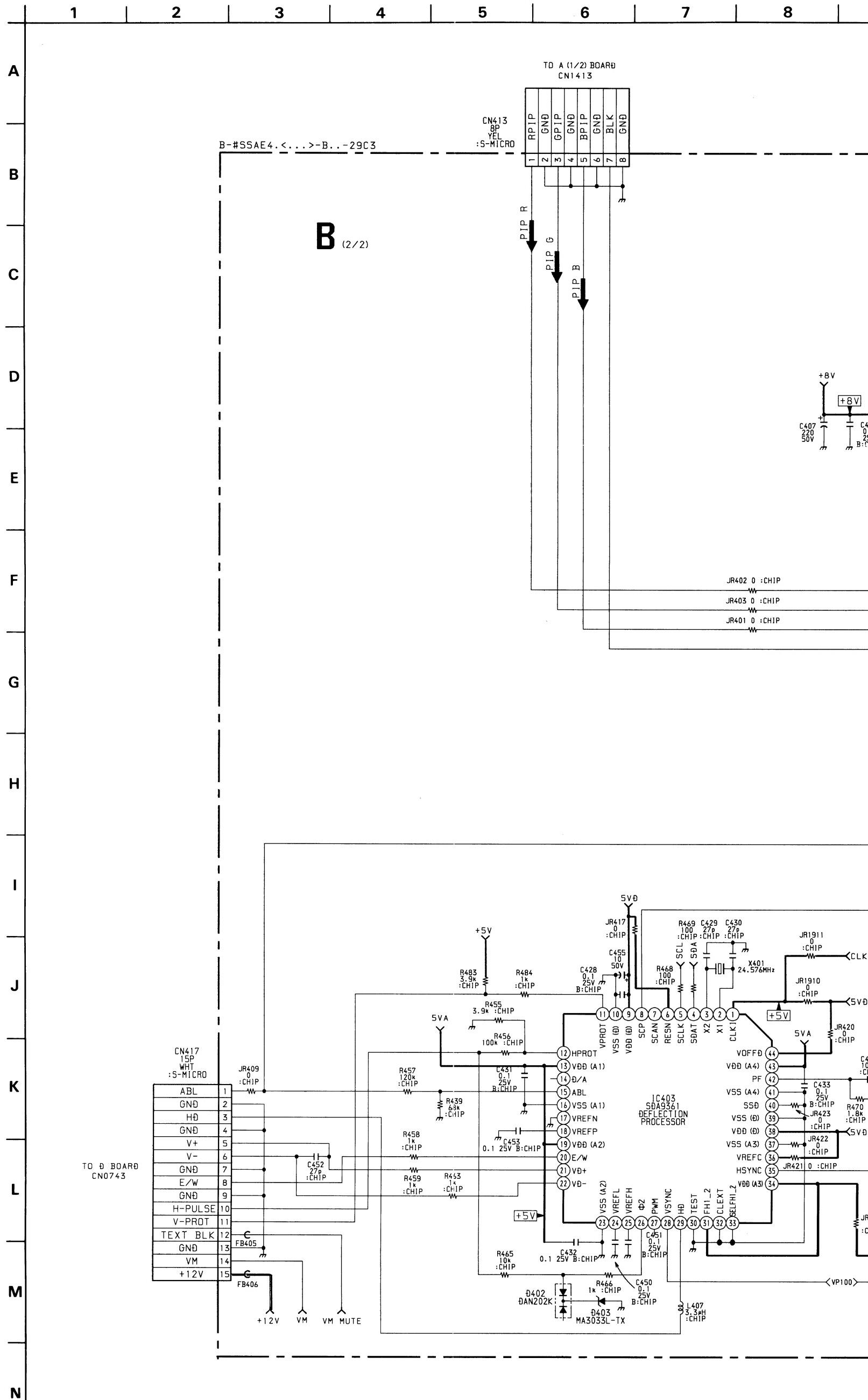
**B (1/2) BOARD  
IC VOLTAGE TABLE**

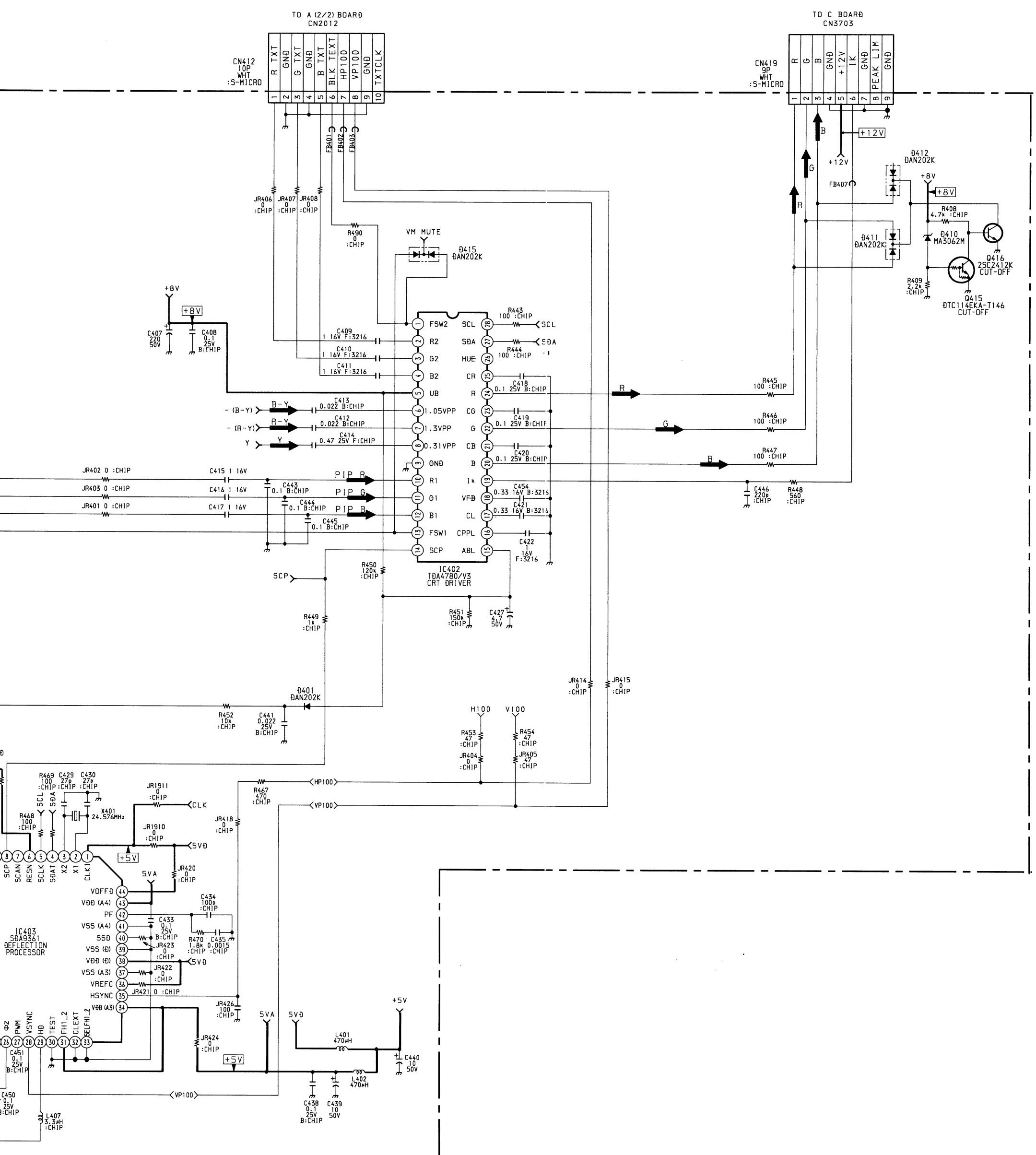
IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC1812	3-4	2.4
	6-7	0.7
	9	4.6
	11-13	4.7
	14	0.3
	16	5.0
IC1813	3-4	2.4
	6-7	0.7
	9	4.6
	11-13	4.7
	14	0.3
	16	5.0
IC1815	1	5.0
	2	2.3
	3-4	2.5
	6-7	0.8
	9-11	3.0
	12	4.5
	13	3.0
	14	0.4
IC1821	15	0.2
	16	5.2
	2	2.5
	4-5	2.3
	12	2.0
	14	2.0
IC1822	15	2.6
	16	8.0
	2	2.9
	4-5	2.6
	12	2.3
	14	2.1

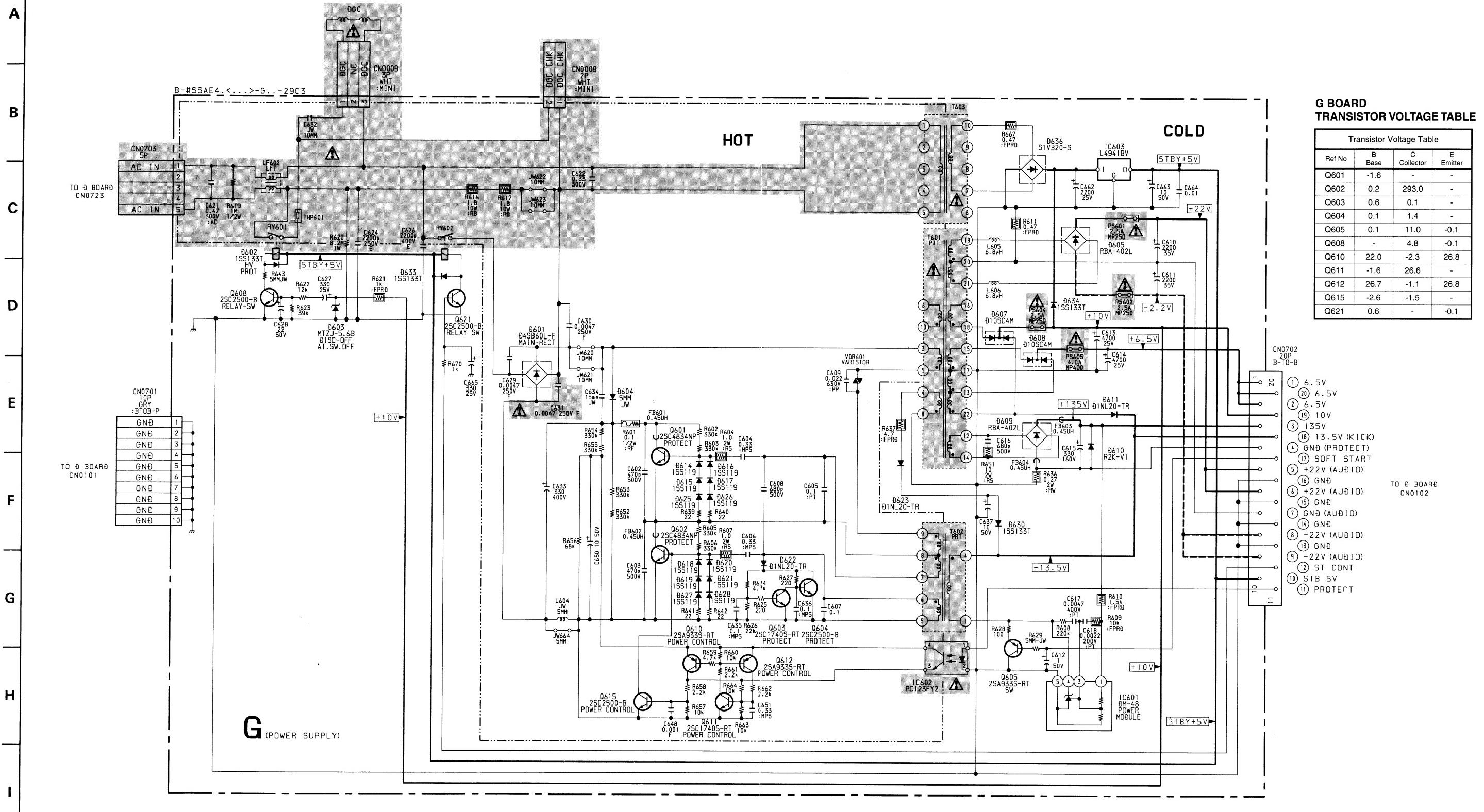
**B (1/2)** A/D, D/A CONVERTER  
DIGITAL NOISE REDUCER  
CRT DRIVER  
DEFLECTION PROCESSOR

**B (2/2) BOARD  
IC VOLTAGE TABLE**

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC402	2-4	5.0
	5	7.8
	6-7	4.0
	8	3.7
	10-12	5.0
	14	0.7
	16	4.7
	17	5.1
	18	1.8
	19	7.5
	20	2.5
	21	3.3
	22	2.8
	23	3.3
	24	2.9
	25	3.3
	27	4.0
	28	3.8
IC405	5	3.2
	9	3.2
	13-14	3.2
IC406	16	4.8







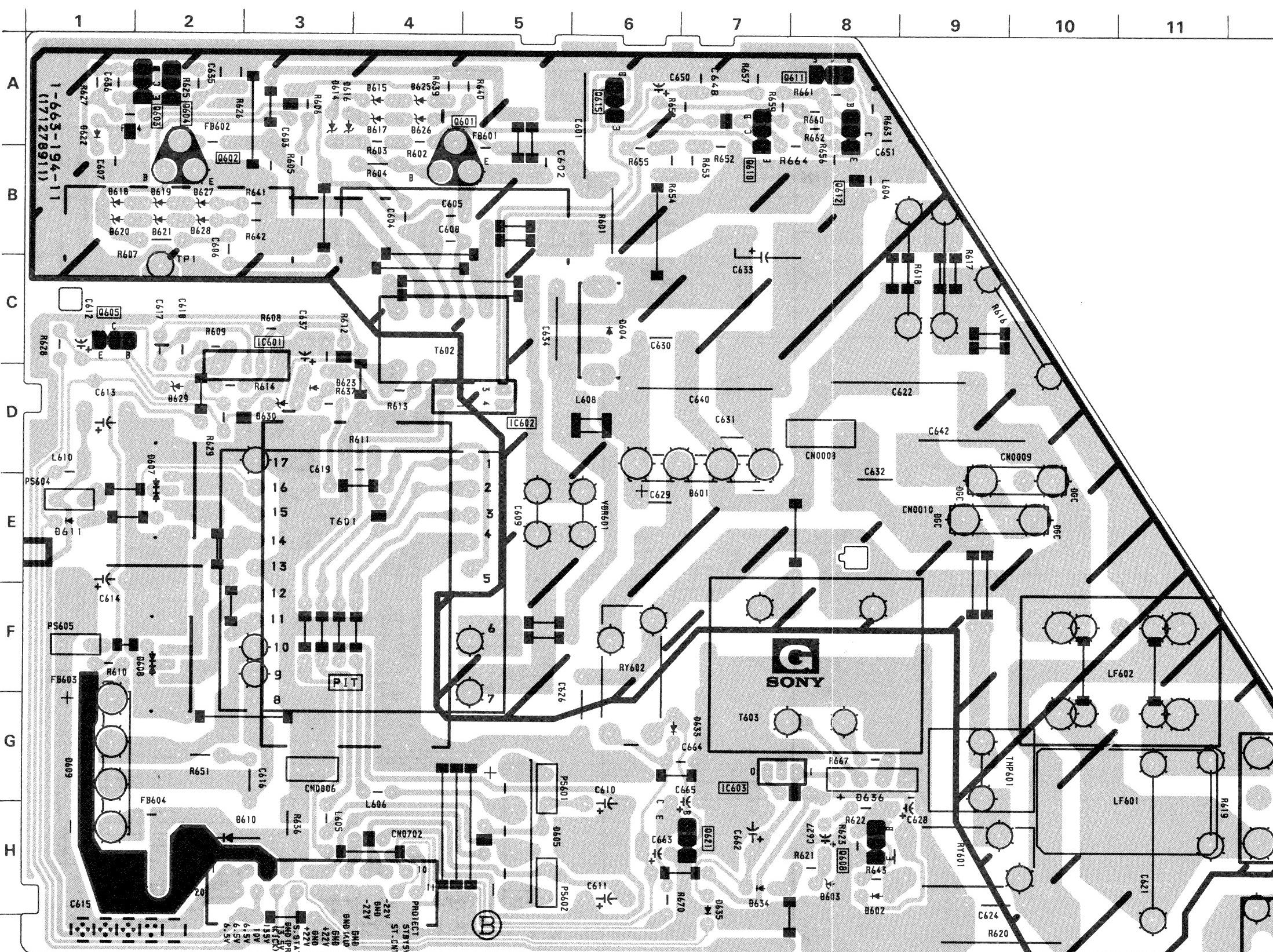
**NOTE:**

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

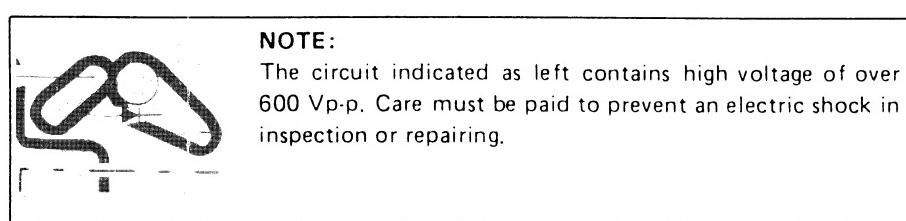
**G**

[ POWER SUPPLY ]

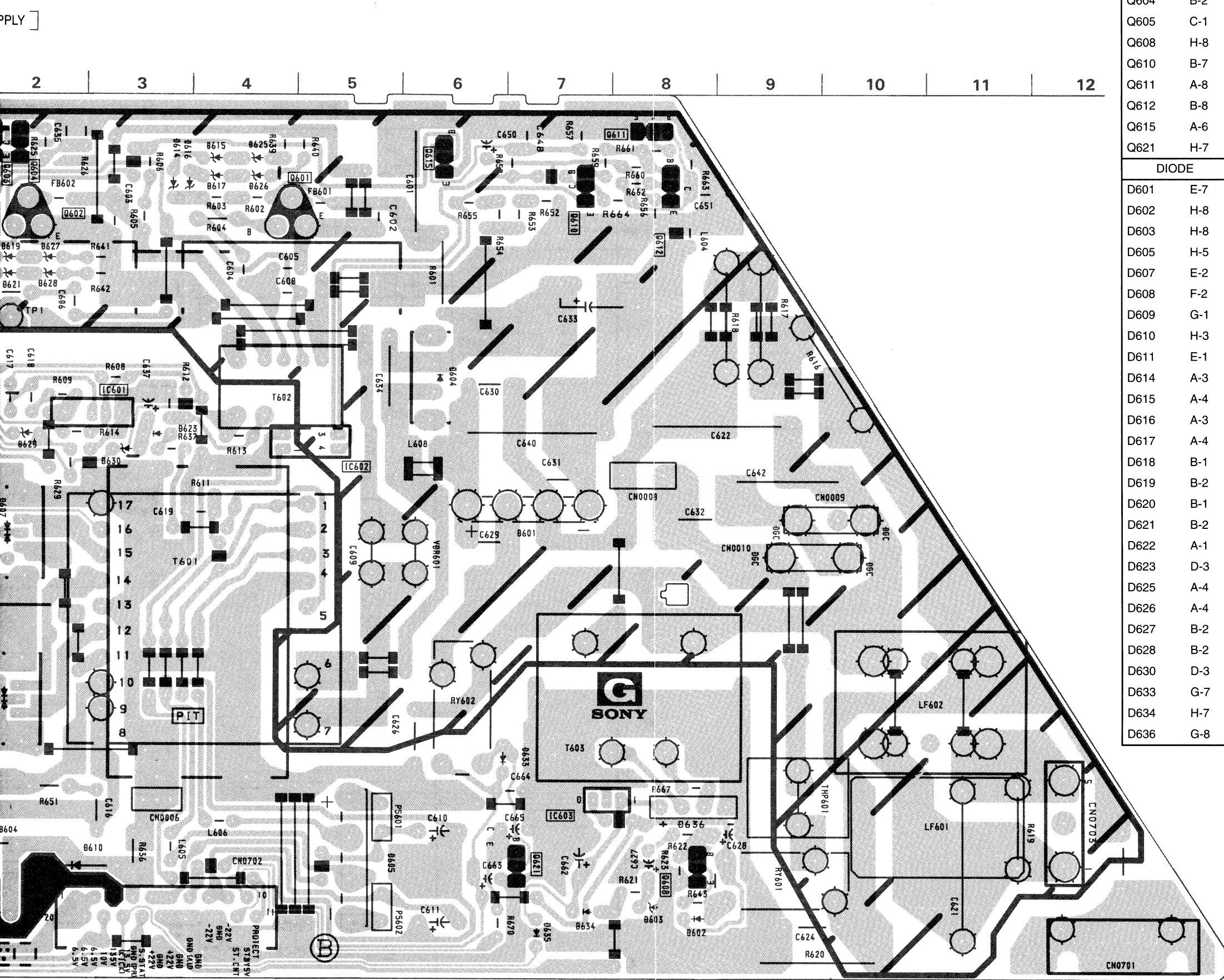
**G Board**



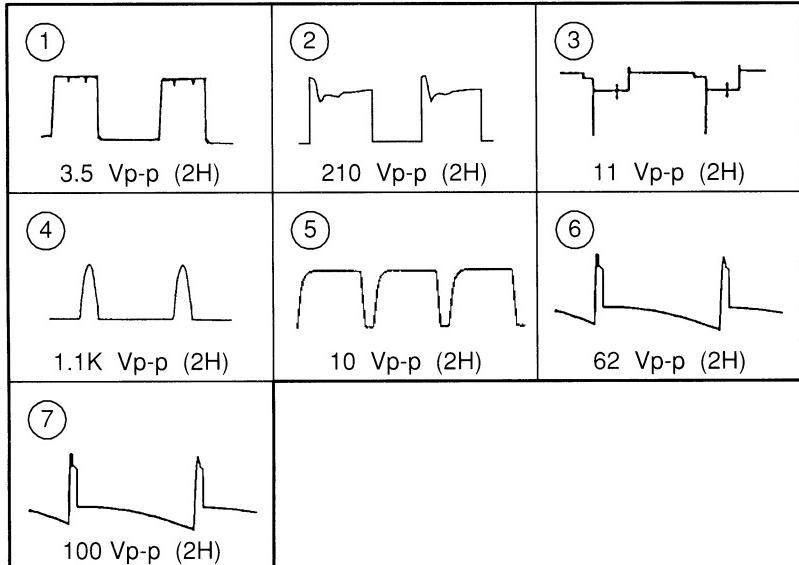
## G BOARD



IC	
IC601	C-3
IC602	D-5
IC603	G-7
TRANSISTOR	
Q601	A-5
Q602	B-2
Q603	B-2
Q604	B-2
Q605	C-1
Q608	H-8
Q610	B-7
Q611	A-8
Q612	B-8
Q615	A-6
Q621	H-7
DIODE	
D601	E-7
D602	H-8
D603	H-8
D605	H-5
D607	E-2
D608	F-2
D609	G-1
D610	H-3
D611	E-1
D614	A-3
D615	A-4
D616	A-3
D617	A-4
D618	B-1
D619	B-2
D620	B-1
D621	B-2
D622	A-1
D623	D-3
D625	A-4
D626	A-4
D627	B-2
D628	B-2
D630	D-3
D633	G-7
D634	H-7
D636	G-8

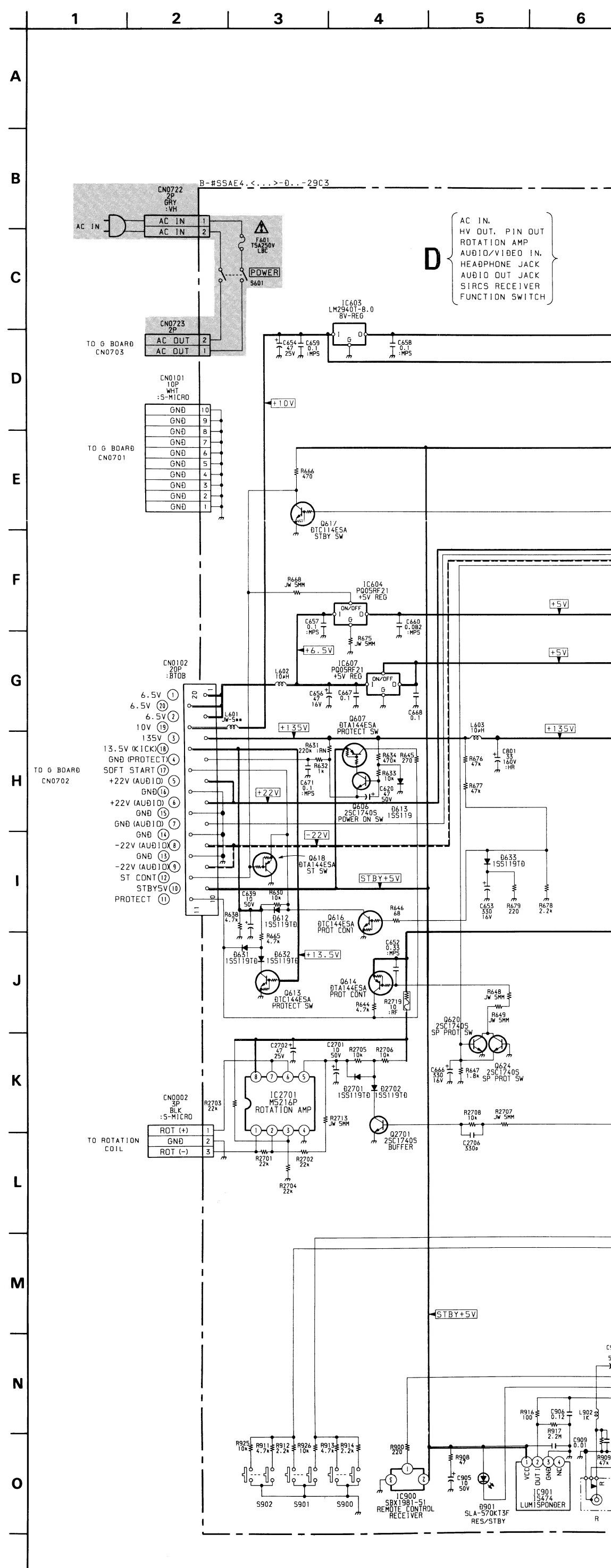


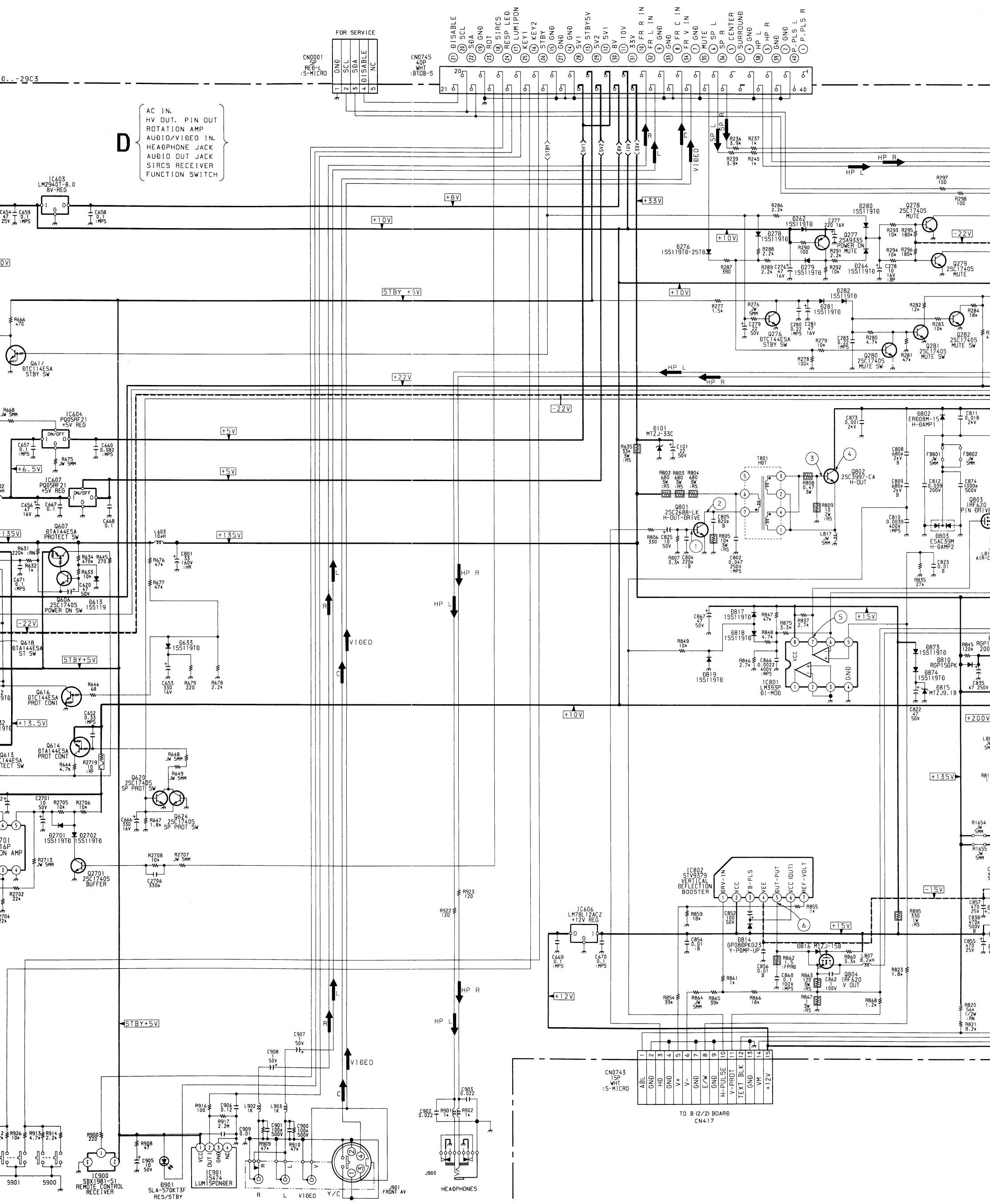
## WAVEFORMS D BOARD

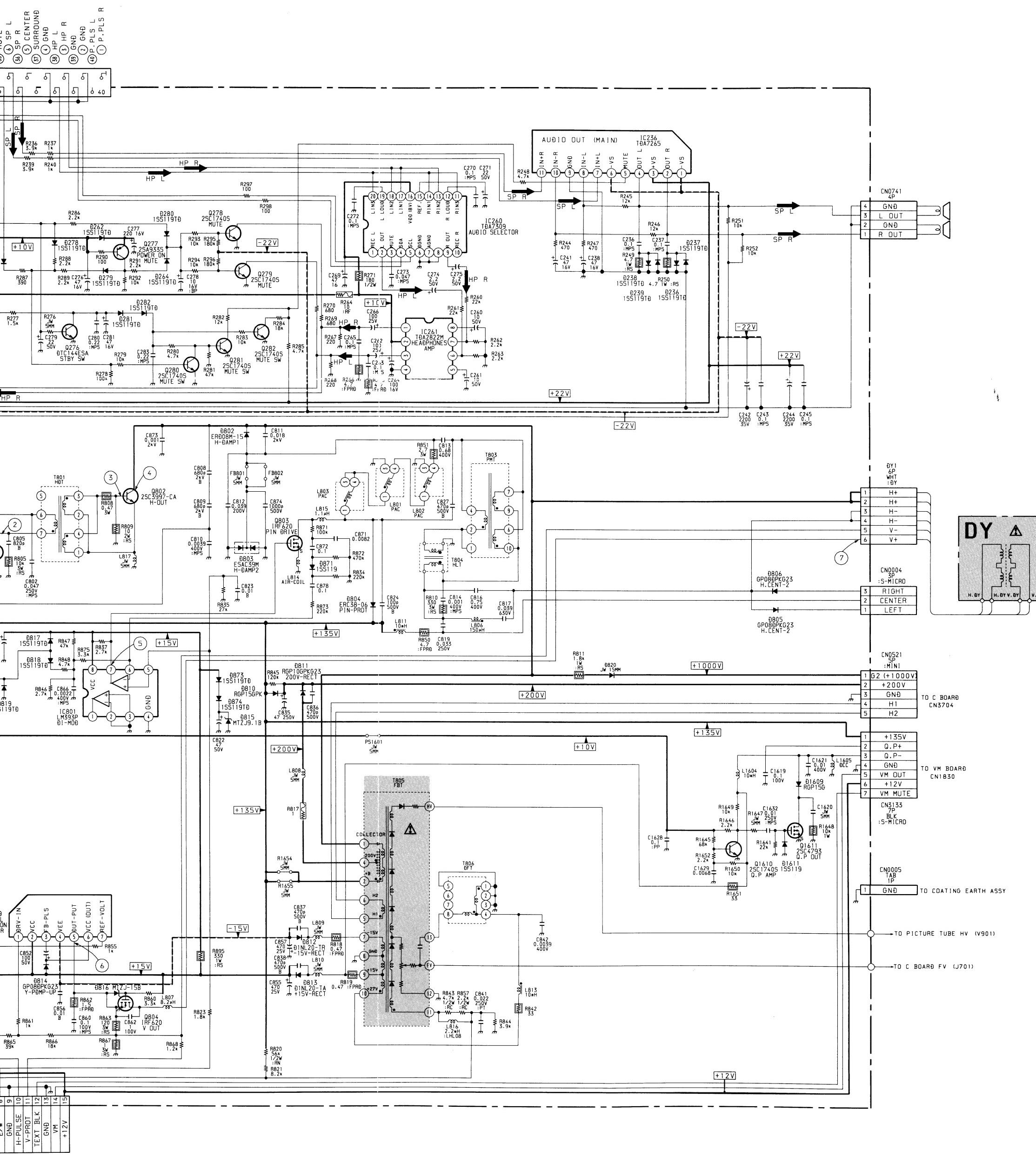


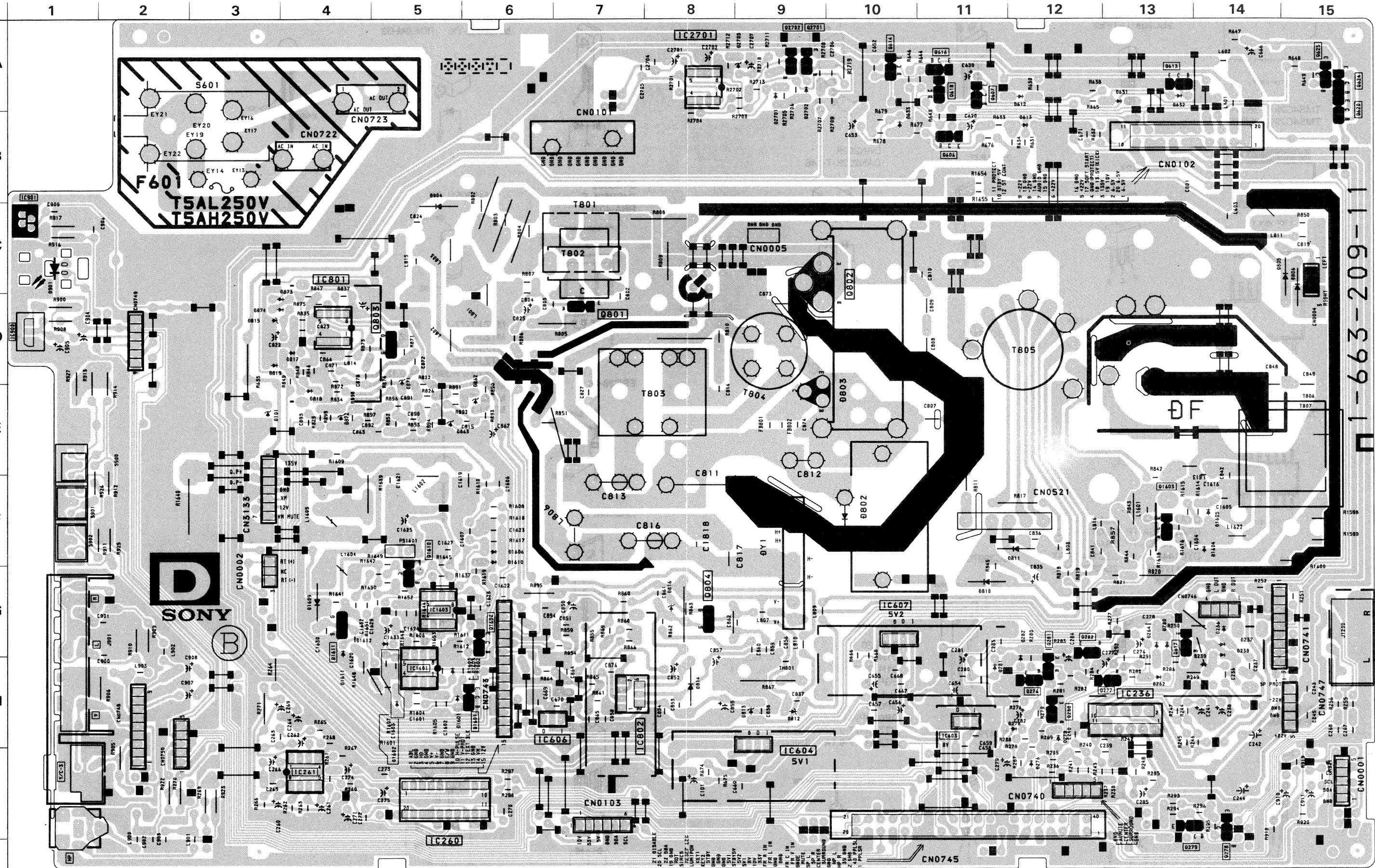
**D BOARD**  
**TRANSISTOR VOLTAGE TABLE**

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q276	0.7	4.0	-
Q277	10.0	-	9.7
Q278	-1.3	-	-
Q279	-1.3	-	-1.3
Q280	0.4	0.7	-
Q281	0.7	-	-
Q282	0.7	-	-
Q801	-1.0	101.0	-
Q802	-	136.0	-
Q803	9.0	15.0	-
Q804	11.3	0.1	-1.3
Q606	0.5	4.8	0.3
Q607	4.8	1.6	4.8
Q613	13.5	-	-
Q614	10.0	9.0	10.0
Q616	0.7	-	-
Q617	0.7	3.5	-
Q618	3.5	-	-
Q620	-	10.0	-
Q624	-	10.0	-
Q2701	-	2.3	-
Q1610	-0.5	2.2	-
Q1611	0.2	43.4	-



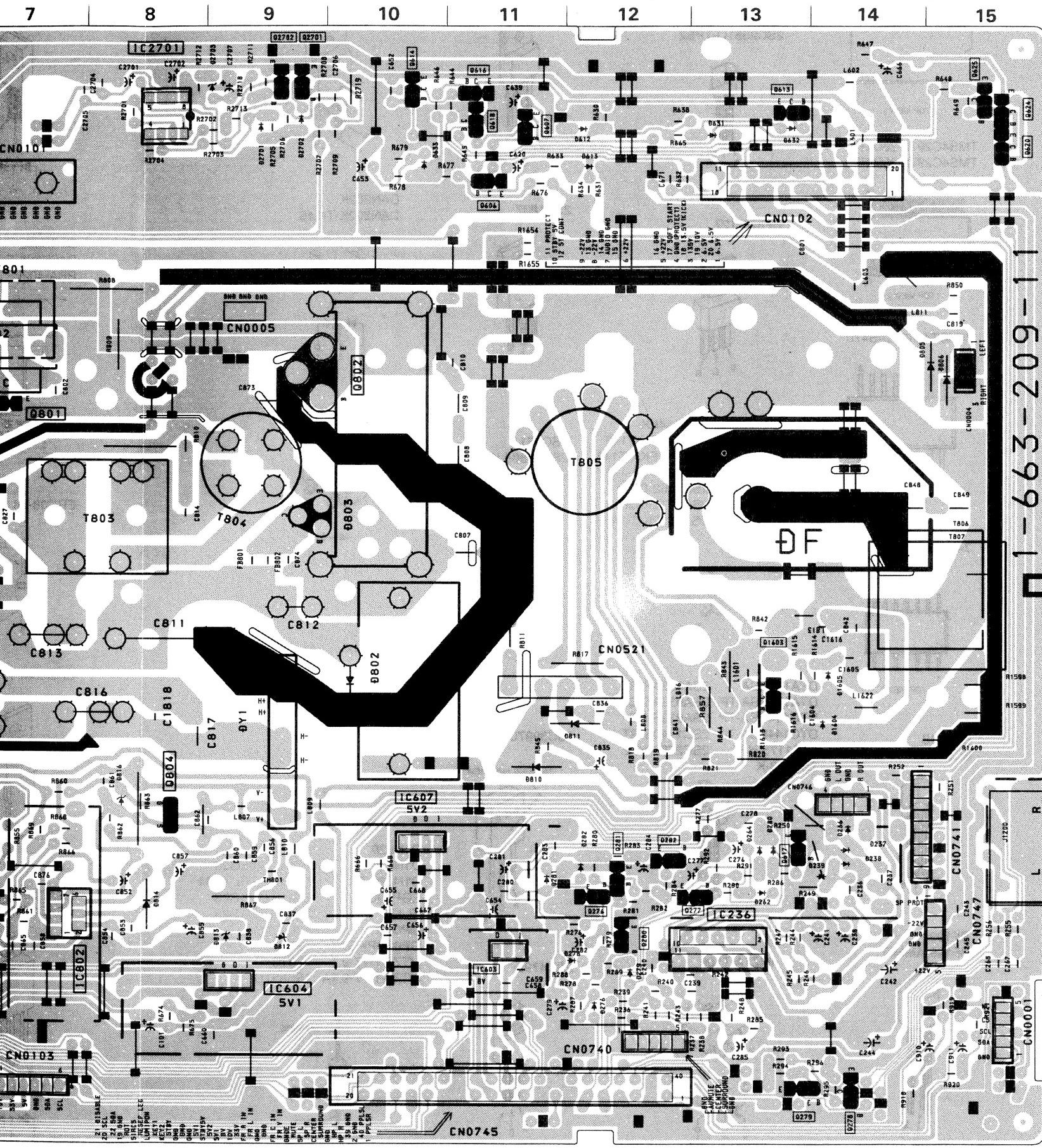
TO A (1/2) BOARD  
CN101





1 - 663-209-11

IC236  
IC260  
IC261  
IC603  
IC604  
IC606  
IC607  
IC801  
IC802  
IC900  
IC901  
IC2701  
TRAN  
Q276  
Q277  
Q278  
Q279  
Q280  
Q281  
Q282  
Q606  
Q607  
Q613  
Q614  
Q616  
Q617  
Q618  
Q620  
Q624  
Q801  
Q802  
Q803  
Q804  
Q1610  
Q1611  
Q2701



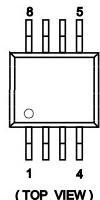
## D BOARD

IC	DIODE
IC236	H-13
IC260	I-5
IC261	I-4
IC603	H-11
IC604	H-9
IC606	H-7
IC607	G-10
IC801	C-4
IC802	H-8
IC900	D-1
IC901	C-1
IC2701	A-8
TRANSISTOR	
Q276	H12
Q277	H-13
Q278	I-14
Q279	I-14
Q280	H-12
Q281	G-12
Q282	G-13
Q606	B-11
Q607	A-11
Q613	A-13
Q614	A-10
Q616	A-11
Q617	G-13
Q618	A-11
Q620	A-15
Q624	A-15
Q801	D-7
Q802	C-10
Q803	D-5
Q804	G-8
Q1610	F-5
Q1611	G-4
Q2701	A-9
D101	E-3
D236	G-14
D237	G-14
D238	G-14
D239	G-14
D262	H-13
D264	G-13
D276	I-12
D278	H-12
D279	H-12
D280	G-13
D281	H-12
D282	G-12
D612	A-12
D613	B-12
D631	A-13
D632	A-14
D633	B-11
D802	F-10
D803	E-10
D804	B-5
D805	C-15
D806	C-15
D810	G-11
D811	F-12
D812	H-9
D813	H-9
D814	H-8
D815	D-3
D816	G-8
D817	D-4
D818	E-4
D819	D-3
D873	D-4
D874	D-3
D901	C-1
D1609	G-4
D1611	H-4
D2701	A-9
D2702	A-9

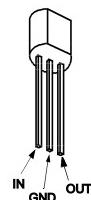
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

#### 5-4. SEMICONDUCTORS

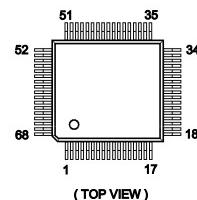
BA7046F  
BA7046F-T1  
MB3793-42PNF  
MB3793-42PNF-ER



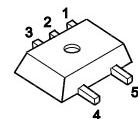
LM78L05ACZ  
LM78L12ACZ  
L78L05ACZ-AP  
L78L12ACZ-AP



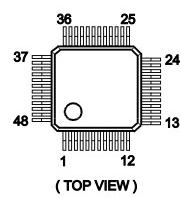
P83C654EBA/560  
SDA9280A41



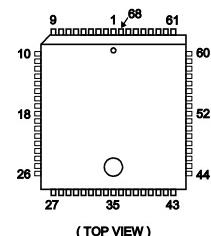
TC4S66F  
TC4S66F-TE85L



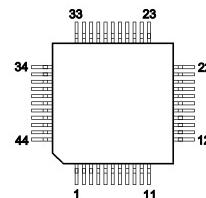
CXA1855Q-T6



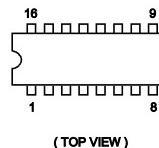
MSP3400C-PS-C6-T-ND  
MSP3410B-PS-F7-T-ND  
SDA30C164-2-GEG  
SDA5273-C126-GEG



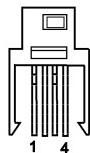
SAA4945H/V1  
SDA9361



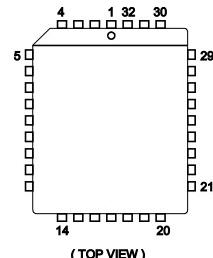
TDA4665T-T



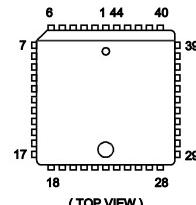
IS474



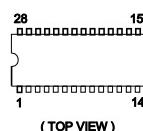
M27C4001-15C1-AE401



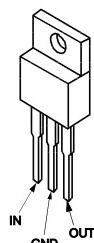
SAA4952WP/V1



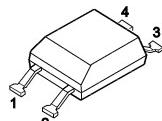
TDA4780/V3



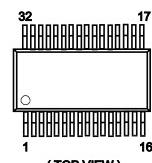
LM2940CT-9.0  
LM2940T-8.0  
LM2940T-9.0  
L4941BV  
TEA7605



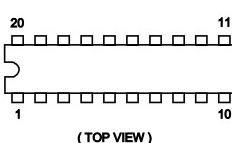
PC123F2  
PC123FY2



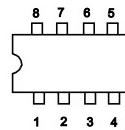
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TDA8755T-T



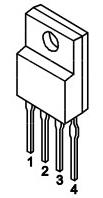
TDA7309



LM393P  
M5216P  
ST24C16FB6  
TDA2822M  
UPC393C

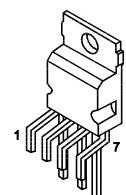


PQ05RF21

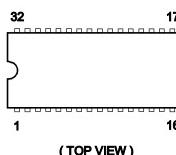


1 : V<sub>IN</sub>  
2 : V<sub>OUT</sub>  
3 : GND  
4 : ON/OFF CONTROL

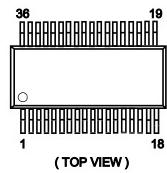
STV9379



TDA9143/N2



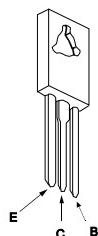
TMS4C2972-26DTR  
TMS4C2972-28DTR



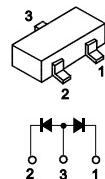
DTA144ESA 2SA933S-RT  
DTA144ESA-TP 2SC1740S-RT  
DTC114ESA-TP 2SC2785-HFE  
DTC144ESA-TP  
2SA1175-HFE



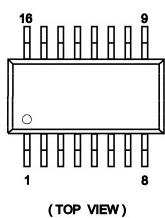
2SC2611  
2SC2688-LK  
2SC3271-N



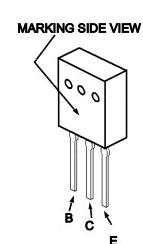
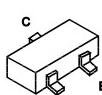
DAP202K  
DAP202K-T-146



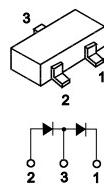
74HCT4046AD/S470



DTC114EK DTC144EKA-T146  
DTC114EKA-T146 2SA1037K-T-146-R  
DTC124EKA-T146 2SA1162-G  
DTC144EK 2SC2412K-QR  
DTC144EK-T146 2SC2412K-T-146-R



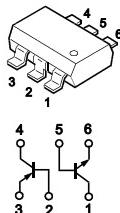
DA204K  
DA204K-T-146



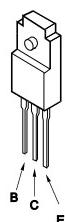
BC546B  
BC556B



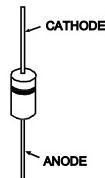
IMZ1A-T109



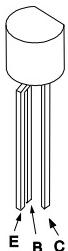
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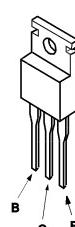
D1NL20-TR RGP02-20EL-6394  
EGP20G RGP10GPKG23  
EL1Z RGP15GPKG23  
GP08D S2LA20F  
GP08DPKG23 1SS133T-77  
R2K-V1 1SS83  
RGP02-20EG23 1SS83TD



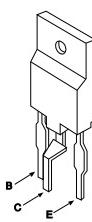
BF199  
BF199-AMMO



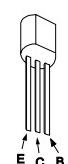
IRF620



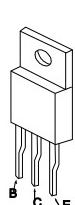
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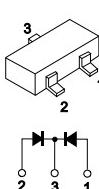
BF421L-AMMO  
2SA1091-O  
2SC2500-B



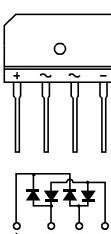
2SA1837



DAN202K  
DAN202K-T-146



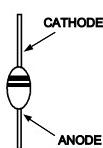
D4SB60L  
D4SB60L-F  
RBA-402L



BF871-127

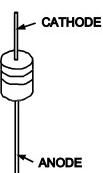
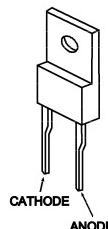


**ERC38-06**



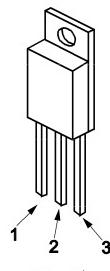
MTZJ-T-77-15B RD15ES-B2  
MTZJ-T-77-33C RD5.6ESB2  
MTZJ-T-77-39C RD9.1ESB2  
MTZJ-T-77-5.6B 1SS119-25  
MTZJ-T-77-9.1B 1SS119-25TD  
MTZJ-39C

**ERD08M-15**

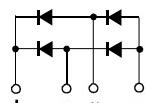
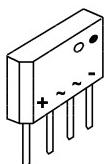


RD12SB2  
UDZ-TE-17-12B

**ESAD39M-06C  
ESAD39M-06CF38**

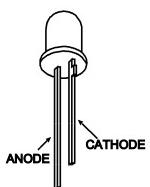
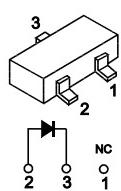


S1VB20-S  
S1VB40

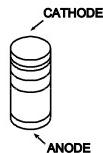


**SLA-570KT3F**

MA3030-H(TX) MA3056M-TX  
MA3033-L MA3062M-TX  
MA3033L-TX RD5.6M-B2

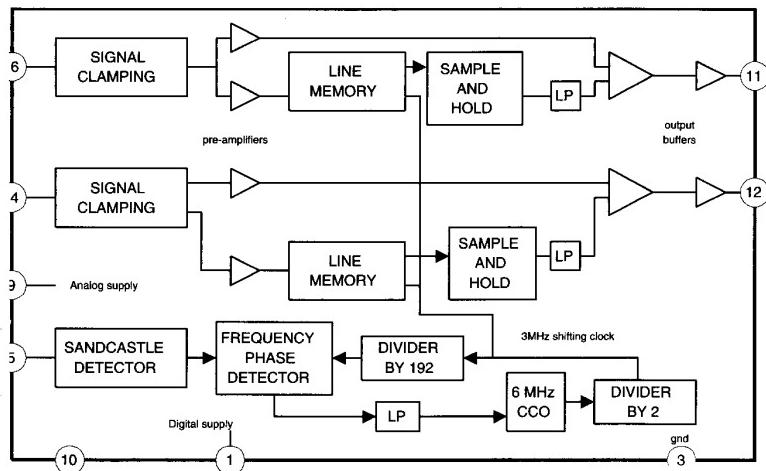


**MA3051L-TX**

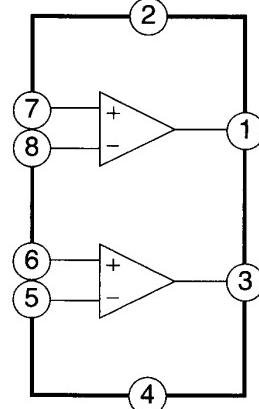


## 5-5. IC BLOCK DIAGRAMS

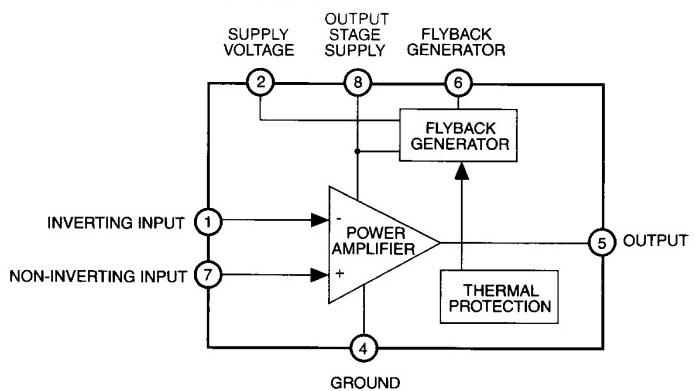
A Board IC303, TDA4665T-T



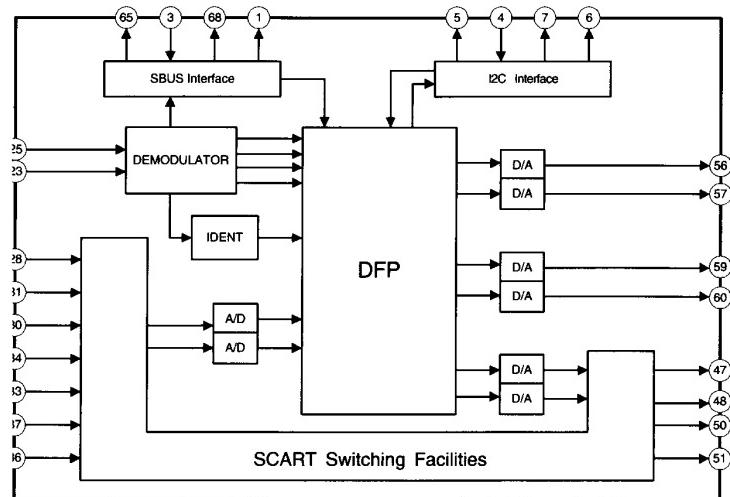
D Board IC261 TDA2822M



D Board IC802 STV9379



A Board IC201 MSP3400C-PS-C6-T/MSP3410B-PS-F7-T



## SECTION 6

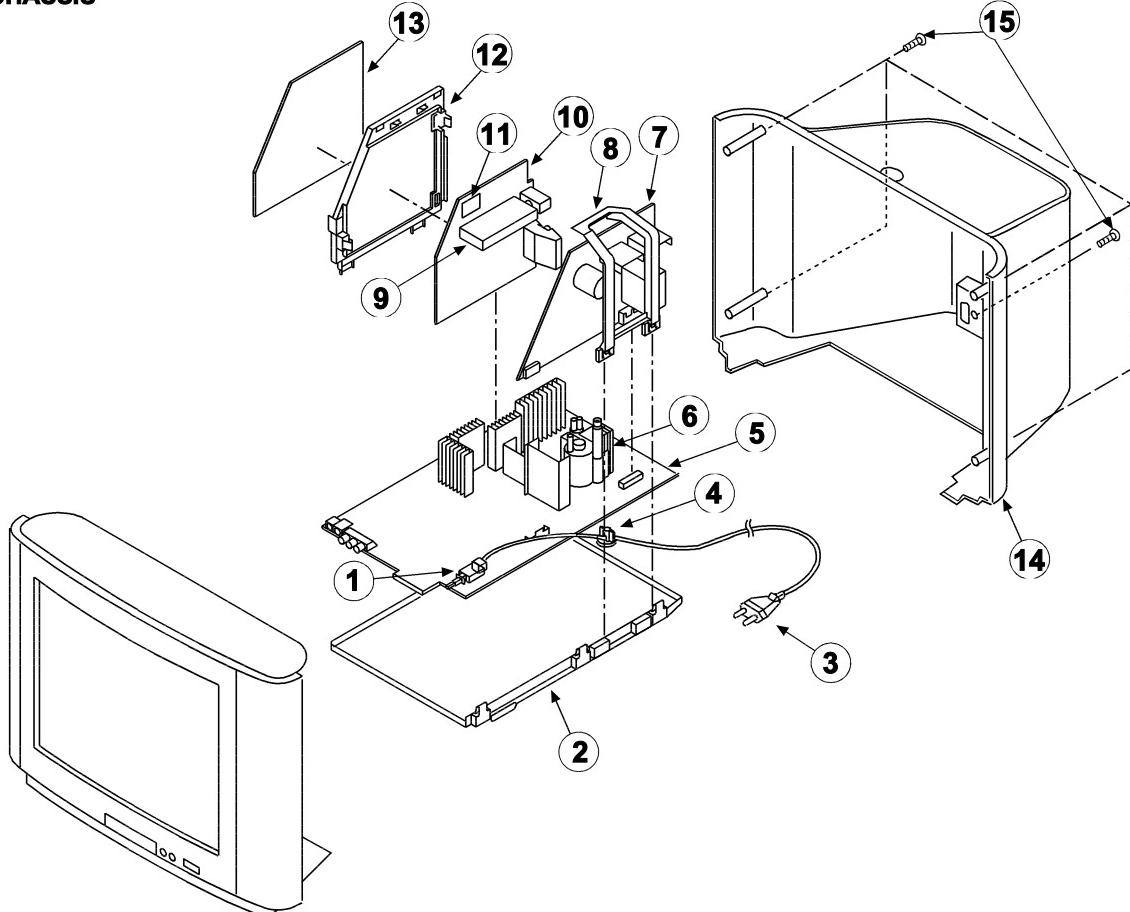
### EXPLODED VIEWS

**NOTE :**

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

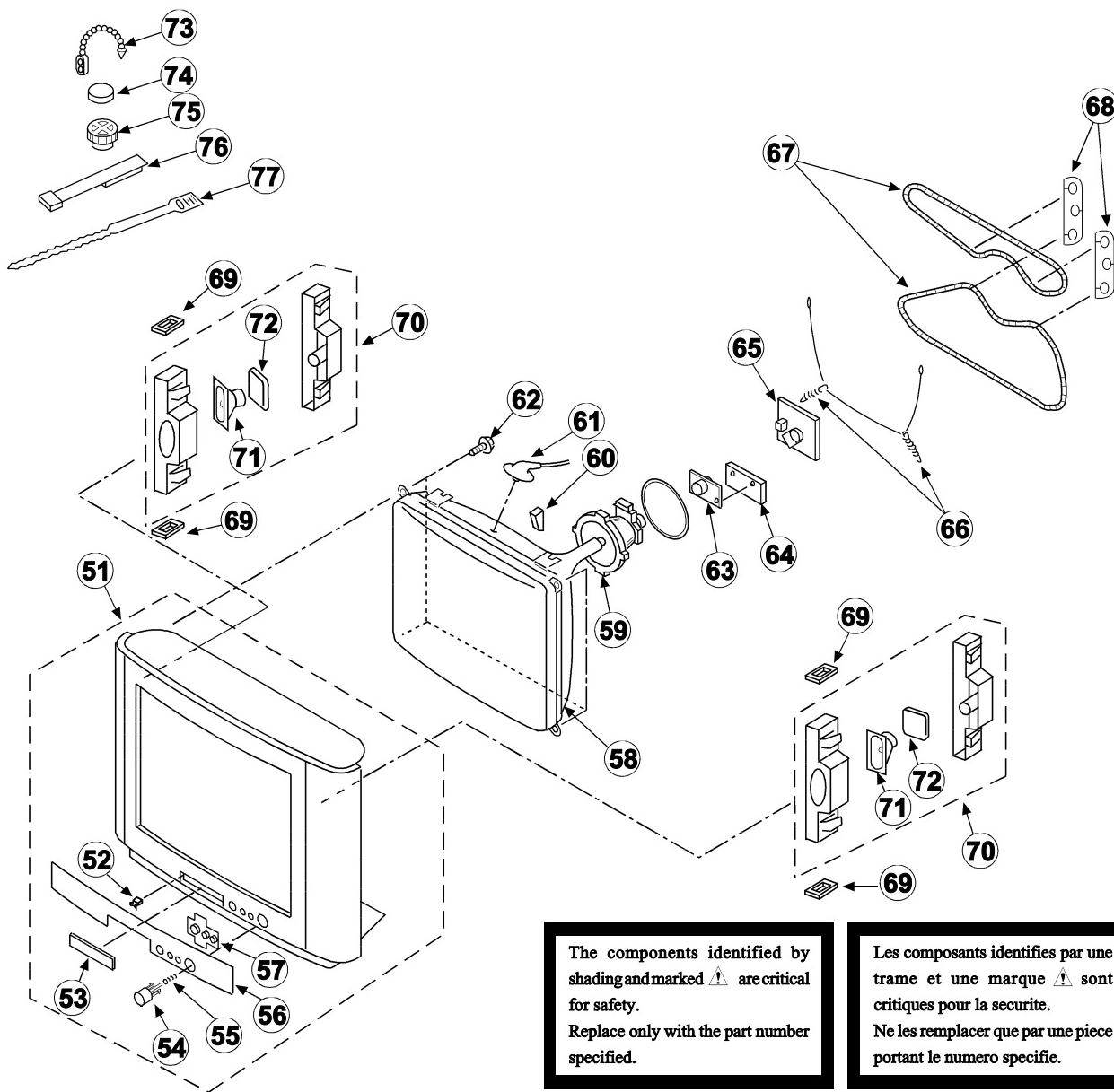
The components identified by shading and marked **⚠** are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par une trame et une marque **⚠** sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

**6-1. CHASSIS**

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	⚠ 1-571-433-21	SWITCH, PUSH (AC POWER)		13	*A-1620-080-A	B BOARD, COMPLETE	
2	*4-203-415-01	BRACKET, MAIN		14	4-202-986-01	COVER, REAR	
3	⚠ 1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V		15	4-039-358-01	SCREW (4X16), (+) BV TAPPING	
4	*4-202-531-01	AC CORD LOCK (SC)					
5	*A-1640-247-A	D BOARD, COMPLETE					
6	⚠ 1-453-222-11	TRANSFORMER ASSY, FLYBACK (NX-4003/U2B4)					
7	*A-1636-021-A	G BOARD, COMPLETE					
8	*4-203-613-01	SUPPORTER, G					
9	1-693-338-11	TUNER (TUVIF) (AEP) (KV-25C3A/25C3D/25C3E)					
10	1-693-340-11	TUNER (TUVIF) (FR) (KV-25C3B)					
	*A-1632-588-A	A BOARD, COMPLETE (KV-25C3A)					
	*A-1632-586-A	A BOARD, COMPLETE (KV-25C3B)					
	*A-1632-505-A	A BOARD, COMPLETE (KV-25C3D)					
	*A-1632-587-A	A BOARD, COMPLETE (KV-25C3E)					
11	*A-1630-690-A	AN BOARD, COMPLETE					
12	*4-203-612-01	BRACKET, A-B					

## **6-2. PICTURE TUBE**



REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
51	X-4200-287-1	BEZNET ASSY (M)	52-57 (KV-25C3A/25C3D)	64	*A-1644-077-A	VM BOARD, COMPLETE	
	X-4200-289-1	BEZNET ASSY (M-N)	52-57 (KV-25C3B/25C3E)	65	*A-1638-097-A	C BOARD, COMPLETE	
52	4-392-036-01	CATCHER PUSH		66	4-369-318-51	SPRING, TENSION	
53	4-203-013-31	DOOR (PAINTED)		67	⚠ 1-406-806-11	COIL DEGAUSSING	
54	4-202-983-01	BUTTON, POWER		68	4-202-745-01	HOLDER, D.G.C. (25")	
55	4-202-964-01	SPRING		69	*4-202-988-01	CUSHION, BOX	
56	X-4200-288-1	PANEL ASSY (M)	(KV-25C3A/25C3D)	70	*A-1678-087-A	BOX ASSY	71-72
	X-4200-290-1	PANEL ASSY (M-N)	(KV-25C3B/25C3E)	71	1-504-146-11	SPEAKER (5X11CM)	
57	4-203-524-01	WINDOW ORNAMENTAL		72	4-200-999-01	STOPPER	
58	⚠ 8-733-243-05	PICTURE TUBE (SD-257) (M60LCS60X)		73	4-308-870-00	CLIP, LEAD WIRE	
59	⚠ 8-451-474-11	DEFLECTION YOKE (Y25GXCB)		74	1-452-032-00	MAGNET, DISK; 10MM Ø	
60	3-704-495-01	SPACER, DY		75	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
61	⚠ 1-251-317-31	CAP ASSY, HIGH-VOLTAGE		76	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
62	4-203-043-01	SCREW (M), PT		77	3-701-007-00	BAND, BINDING	
63	⚠ 8-453-005-11	NECK ASSY PICTURE TUBE (NA297-M)					

## SECTION 7

### ELECTRICAL PARTS LIST

When indicating parts by reference number, please include the board name.

**CAPACITORS**                  **COILS**

MF : mF, PF : mmF              MMH : mH,  $\mu$ H : mH

**B**

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

#### RESISTORS

- All resistors are in ohms
- F : nonflammable

The components identified by shading and marked  $\triangle$  are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par une trame et une marque  $\triangle$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK		
<b>*A-1620-080-A B BOARD, COMPLETE</b>									
*****									
< CAPACITOR >									
C407	1-126-969-11	ELECT	220MF	20%	50V	C1810	1-162-638-11	CERAMIC CHIP 1MF	16V
C408	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1811	1-163-989-11	CERAMIC CHIP 0.033MF	25V
C409	1-162-638-11	CERAMIC CHIP	1MF			C1812	1-163-989-11	CERAMIC CHIP 0.033MF	25V
C410	1-162-638-11	CERAMIC CHIP	1MF			C1813	1-164-489-11	CERAMIC CHIP 0.22MF	16V
C411	1-162-638-11	CERAMIC CHIP	1MF			C1814	1-163-125-00	CERAMIC CHIP 220PF	50V
C412	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V	C1815	1-163-125-00	CERAMIC CHIP 220PF	5%
C413	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V	C1816	1-126-963-11	ELECT	4.7MF
C414	1-164-005-11	CERAMIC CHIP	0.47MF			C1817	1-164-004-11	CERAMIC CHIP 0.1MF	25V
C415	1-162-638-11	CERAMIC CHIP	1MF			C1818	1-164-004-11	CERAMIC CHIP 0.1MF	25V
C416	1-162-638-11	CERAMIC CHIP	1MF			C1819	1-163-097-00	CERAMIC CHIP 15PF	50V
C417	1-162-638-11	CERAMIC CHIP	1MF			C1820	1-163-097-00	CERAMIC CHIP 15PF	5%
C418	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1821	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C419	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1822	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C420	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1823	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C421	1-162-568-11	CERAMIC CHIP	0.33MF	10%	16V	C1824	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C422	1-162-638-11	CERAMIC CHIP	1MF			C1825	1-126-964-11	ELECT	10MF
C427	1-126-963-11	ELECT	4.7MF	20%	50V	C1826	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C428	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1827	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C429	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	C1828	1-163-117-00	CERAMIC CHIP 100PF	5%
C430	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	C1829	1-163-097-00	CERAMIC CHIP 15PF	50V
C431	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1830	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C432	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1831	1-163-125-00	CERAMIC CHIP 220PF	5%
C433	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1850	1-163-107-00	CERAMIC CHIP 39PF	5%
C434	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C1852	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C435	1-163-145-00	CERAMIC CHIP	0.0015MF	5%	50V	C1856	1-163-105-00	CERAMIC CHIP 33PF	50V
C438	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1857	1-163-101-00	CERAMIC CHIP 22PF	5%
C439	1-126-964-11	ELECT	10MF	20%	50V	C1858	1-163-989-11	CERAMIC CHIP 0.033MF	10%
C440	1-126-964-11	ELECT	10MF	20%	50V	C1859	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C441	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V	C1860	1-126-961-11	ELECT	2.2MF
C446	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	C1861	1-163-097-00	CERAMIC CHIP 15PF	5%
C450	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1862	1-163-097-00	CERAMIC CHIP 15PF	50V
C451	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1864	1-163-002-11	CERAMIC CHIP 270PF	10%
C452	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	C1866	1-126-964-11	ELECT	10MF
C453	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1867	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C454	1-162-568-11	CERAMIC CHIP	0.33MF	10%	16V	C1868	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C455	1-126-964-11	ELECT	10MF	20%	50V	C1869	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C1801	1-126-963-11	ELECT	4.7MF	20%	50V	C1870	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C1802	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	C1871	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C1803	1-126-964-11	ELECT	10MF	20%	50V	C1872	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C1804	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1873	1-164-004-11	CERAMIC CHIP 0.1MF	10%
C1805	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	C1874	1-164-004-11	CERAMIC CHIP 0.1MF	10%



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
C1875	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V		< IC >		
C1879	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	IC402	8-759-275-36	IC TDA4780/V3	
C1880	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	IC403	8-759-421-42	IC SDA9361	
C1881	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	IC1801	8-759-257-59	IC TDA8755T-T	
C1882	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	IC1802	8-759-439-63	IC SAA4945E/V1	
C1883	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	IC1803	8-759-439-27	IC TMS4C2972-28DTR	
C1886	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V				
C1887	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	IC1809	8-759-438-63	IC SDA9280A41	
C1890	1-126-964-11	ELECT 10MF	20%	50V	IC1812	8-759-444-24	IC 74HCT4046AD/S470	
C1891	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	IC1814	8-759-438-64	IC SAA4952WP/V1	
C1898	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	IC1815	8-759-444-24	IC 74HCT4046AD/S470	
C1899	1-163-097-00	CERAMIC CHIP 15PF	5%	50V	IC1816	8-759-444-25	IC P83C654EBA/560	
C1903	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	IC1823	8-759-991-41	IC LM78L05ACZ	
C1904	1-163-145-00	CERAMIC CHIP 0.0015MF	5%	50V	IC1824	8-759-991-41	IC LM78L05ACZ	
C1905	1-126-964-11	ELECT 10MF	20%	50V	IC1825	8-759-234-77	IC TC4866F	
C1910	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V		< COIL >		
C1912	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	I401	1-408-429-00	INDUCTOR	470UH
C1919	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	I402	1-408-429-00	INDUCTOR	470UH
C1931	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	I407	1-410-999-11	INDUCTOR CHIP	3.3UH
C1947	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	I1801	1-410-435-21	INDUCTOR	220UH
C1948	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	I1802	1-410-435-21	INDUCTOR	220UH
JR426	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	I1803	1-408-403-00	INDUCTOR	3.3UH
		< CONNECTOR >		I1804	1-408-409-00	INDUCTOR	10UH	
CN412	*1-564-513-11	PLUG, CONNECTOR 10P		I1805	1-410-999-11	INDUCTOR CHIP	3.3UH	
CN413	*1-564-511-11	PLUG, CONNECTOR 8P		I1808	1-408-403-00	INDUCTOR	3.3UH	
CN417	*1-564-596-11	PLUG, CONNECTOR 15P		I1814	1-408-403-00	INDUCTOR	3.3UH	
CN419	*1-564-512-11	PLUG, CONNECTOR 9P						
CN1810	*1-564-512-11	PLUG, CONNECTOR 9P						
		< DIODE >						
CN1815	*1-564-512-11	PLUG, CONNECTOR 9P		Q415	8-729-900-53	TRANSISTOR DTC114EK		
D401	8-719-914-43	DIODE DAN202K-T-146		Q416	8-729-920-74	TRANSISTOR 2SC2412K-QR		
D402	8-719-914-43	DIODE DAN202K-T-146		Q1801	8-729-216-22	TRANSISTOR 2SA1162-G		
D403	8-719-028-00	DIODE MA3033L-TX		Q1802	8-729-901-01	TRANSISTOR DTC144EK		
D410	8-719-401-63	DIODE MA3062M-TX		Q1804	8-729-901-01	TRANSISTOR DTC144EK		
D411	8-719-914-43	DIODE DAN202K-T-146						
D412	8-719-914-43	DIODE DAN202K-T-146		Q1805	8-729-216-22	TRANSISTOR 2SA1162-G		
D415	8-719-914-43	DIODE DAN202K-T-146		Q1808	8-729-901-01	TRANSISTOR DTC144EK		
		< FERRITE BEAD >		Q1809	8-729-901-01	TRANSISTOR DTC144EK		
				Q1810	8-729-901-01	TRANSISTOR DTC144EK		
				Q1812	8-729-920-74	TRANSISTOR 2SC2412K-QR		
		< RESISTOR >						
				C1916	1-216-043-91	METAL GLAZE	560 5% 1/10W	
				C1921	1-216-176-11	METAL GLAZE	120 5% 1/8W	
				I1811	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR401	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR402	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR403	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR404	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR405	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR406	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR407	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR408	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR409	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR414	1-216-295-91	METAL GLAZE	0 5% 1/10W	
		< ENCAPSULATED FILTER >		JR415	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR417	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR418	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR420	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR421	1-216-295-91	METAL GLAZE	0 5% 1/10W	
				JR422	1-216-295-91	METAL GLAZE	0 5% 1/10W	

## B

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
JR423	1-216-295-91	METAL GLAZE	0 5% 1/10W	R447	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR424	1-216-295-91	METAL GLAZE	0 5% 1/10W	R448	1-216-043-91	METAL GLAZE	560 5% 1/10W
JR1814	1-216-295-91	METAL GLAZE	0 5% 1/10W	R449	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1815	1-216-295-91	METAL GLAZE	0 5% 1/10W	R450	1-216-099-00	METAL GLAZE	120K 5% 1/10W
JR1816	1-216-295-91	METAL GLAZE	0 5% 1/10W	R451	1-216-101-00	METAL GLAZE	150K 5% 1/10W
JR1817	1-216-295-91	METAL GLAZE	0 5% 1/10W	R452	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1818	1-216-295-91	METAL GLAZE	0 5% 1/10W	R453	1-216-017-91	METAL GLAZE	47 5% 1/10W
JR1819	1-216-295-91	METAL GLAZE	0 5% 1/10W	R454	1-216-017-91	METAL GLAZE	47 5% 1/10W
JR1820	1-216-295-91	METAL GLAZE	0 5% 1/10W	R455	1-216-063-91	METAL GLAZE	3.9K 5% 1/10W
JR1821	1-216-295-91	METAL GLAZE	0 5% 1/10W	R456	1-216-097-91	METAL GLAZE	100K 5% 1/10W
JR1822	1-216-295-91	METAL GLAZE	0 5% 1/10W	R457	1-216-099-00	METAL GLAZE	120K 5% 1/10W
JR1823	1-216-295-91	METAL GLAZE	0 5% 1/10W	R458	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1824	1-216-295-91	METAL GLAZE	0 5% 1/10W	R459	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1825	1-216-295-91	METAL GLAZE	0 5% 1/10W	R463	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1826	1-216-295-91	METAL GLAZE	0 5% 1/10W	R465	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1827	1-216-295-91	METAL GLAZE	0 5% 1/10W	R466	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1828	1-216-295-91	METAL GLAZE	0 5% 1/10W	R467	1-216-041-00	METAL GLAZE	470 5% 1/10W
JR1829	1-216-295-91	METAL GLAZE	0 5% 1/10W	R468	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1830	1-216-295-91	METAL GLAZE	0 5% 1/10W	R469	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1831	1-216-295-91	METAL GLAZE	0 5% 1/10W	R470	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
JR1832	1-216-295-91	METAL GLAZE	0 5% 1/10W	R483	1-216-063-91	METAL GLAZE	3.9K 5% 1/10W
JR1833	1-216-295-91	METAL GLAZE	0 5% 1/10W	R484	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1834	1-216-295-91	METAL GLAZE	0 5% 1/10W	R490	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR1835	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1801	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
JR1836	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1802	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1837	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1803	1-216-296-91	METAL GLAZE	0 5% 1/8W
JR1838	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1804	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
JR1839	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1805	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1840	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1806	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
JR1843	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1807	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1845	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1808	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1846	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1809	1-216-033-00	METAL GLAZE	220 5% 1/10W
JR1866	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1810	1-216-076-00	METAL GLAZE	13K 5% 1/10W
JR1868	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1811	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1869	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1812	1-216-033-00	METAL GLAZE	220 5% 1/10W
JR1870	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1813	1-216-045-00	METAL GLAZE	680 5% 1/10W
JR1871	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1814	1-216-031-00	METAL GLAZE	180 5% 1/10W
JR1872	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1815	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1873	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1816	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR1874	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1817	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1875	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1818	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1890	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1819	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1891	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1820	1-216-029-00	METAL GLAZE	150 5% 1/10W
JR1893	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1821	1-216-023-00	METAL GLAZE	82 5% 1/10W
JR1894	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1822	1-216-296-91	METAL GLAZE	0 5% 1/8W
JR1896	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1831	1-216-081-00	METAL GLAZE	22K 5% 1/10W
JR1897	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1832	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
JR1898	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1833	1-216-041-00	METAL GLAZE	470 5% 1/10W
JR1899	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1834	1-216-115-00	METAL GLAZE	560K 5% 1/10W
JR1901	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1835	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1905	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1844	1-216-081-00	METAL GLAZE	22K 5% 1/10W
JR1910	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1845	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
JR1911	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1846	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R408	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1847	1-216-115-00	METAL GLAZE	560K 5% 1/10W
R409	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1848	1-216-025-91	METAL GLAZE	100 5% 1/10W
R439	1-216-093-00	METAL GLAZE	68K 5% 1/10W	R1849	1-216-001-00	METAL GLAZE	10 5% 1/10W
R443	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1850	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R444	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1851	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R445	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1852	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R446	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1853	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W

B	A
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REF.NO.	PART NO.	DESCRIPTION				REMARK	REF.NO.	PART NO.	DESCRIPTION				REMARK
R1854	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W		C105	1-126-965-11	ELECT	22MF	20%	50V	
R1855	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W		C111	1-126-964-11	ELECT	10MF	20%	50V	
R1856	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W		C112	1-164-346-11	CERAMIC CHIP	1MF	10%	16V	
R1857	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W		C114	1-164-346-11	CERAMIC CHIP	1MF	10%	16V	
R1858	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W		C116	1-126-967-11	ELECT	47MF	20%	16V	
R1859	1-216-017-91	METAL GLAZE	47	5%	1/10W		C117	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
R1861	1-216-295-91	METAL GLAZE	0	5%	1/10W		C118	1-126-967-11	ELECT	47MF	20%	16V	
R1864	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W		C119	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
R1866	1-216-089-91	METAL GLAZE	47K	5%	1/10W		C120	1-126-964-11	ELECT	10MF	20%	50V	
R1867	1-216-075-00	METAL GLAZE	12K	5%	1/10W		C121	1-164-299-11	CERAMIC CHIP	0.22MF	10%	25V	
R1868	1-216-089-91	METAL GLAZE	47K	5%	1/10W		C122	1-164-346-11	CERAMIC CHIP	1MF	10%	16V	
R1869	1-216-049-91	METAL GLAZE	1K	5%	1/10W		C126	1-126-967-11	ELECT	47MF	20%	16V	
R1871	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W		C127	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
R1879	1-216-049-91	METAL GLAZE	1K	5%	1/10W		C128	1-126-967-11	ELECT	47MF	20%	16V	
R1880	1-216-085-00	METAL GLAZE	33K	5%	1/10W		C129	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
R1881	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W		C130	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
R1882	1-216-085-00	METAL GLAZE	33K	5%	1/10W		C131	1-164-346-11	CERAMIC CHIP	1MF	10%	16V	
R1885	1-216-049-91	METAL GLAZE	1K	5%	1/10W		C132	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
R1886	1-216-295-91	METAL GLAZE	0	5%	1/10W		C133	1-164-346-11	CERAMIC CHIP	1MF	10%	16V	
R1888	1-216-021-00	METAL GLAZE	68	5%	1/10W		C134	1-126-964-11	ELECT	10MF	20%	50V	
R1890	1-216-295-91	METAL GLAZE	0	5%	1/10W		C135	1-164-299-11	CERAMIC CHIP	0.22MF	10%	25V	
R1891	1-216-295-91	METAL GLAZE	0	5%	1/10W		C136	1-126-964-11	ELECT	10MF	20%	50V	
R1894	1-216-047-91	METAL GLAZE	820	5%	1/10W		C137	1-164-506-11	CERAMIC CHIP	4.7MF	10%	16V	
R1895	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W		C138	1-126-964-11	ELECT	10MF	20%	50V	
R1896	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C139	1-164-346-11	CERAMIC CHIP	1MF	10%	16V	
R1897	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W		C140	1-164-506-11	CERAMIC CHIP	4.7MF	10%	16V	
R1901	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C141	1-164-506-11	CERAMIC CHIP	4.7MF	10%	16V	
R1902	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C143	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
R1903	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C144	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	
R1904	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C145	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
R1905	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W								(KV-25C3B)
R1906	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C146	1-164-346-11	CERAMIC CHIP	1MF	10%	16V	
R1907	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C150	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
R1908	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C151	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
R1909	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C152	1-126-964-11	ELECT	10MF	20%	50V	
R1910	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C153	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V	
R1911	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C154	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V	
R1912	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		C155	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
R1920	1-216-295-91	METAL GLAZE	0	5%	1/10W		C156	1-164-506-11	CERAMIC CHIP	4.7MF	10%	16V	
R1921	1-216-295-91	METAL GLAZE	0	5%	1/10W		C157	1-164-506-11	CERAMIC CHIP	4.7MF	10%	16V	
R1922	1-216-025-91	METAL GLAZE	100	5%	1/10W		C159	1-164-505-11	CERAMIC CHIP	2.2MF	10%	16V	
< CRYSTAL >													
X401	1-767-343-21	VIBRATOR, CRYSTAL (24.576MHz)					C160	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
X1801	1-579-175-11	VIBRATOR, CERAMIC (10MHz)					C162	1-164-346-11	CERAMIC CHIP	1MF	10%	16V	
*****													
*A-1632-588-A A BOARD, COMPLETE (KV-25C3A) *****													
*A-1632-586-A A BOARD, COMPLETE (KV-25C3B) *****													
*A-1632-505-A A BOARD, COMPLETE (KV-25C3D) *****													
*A-1632-587-A A BOARD, COMPLETE (KV-25C3E) *****													
< CAPACITOR >													
C101	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V			C208	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V	
C102	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V			C209	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V	
C103	1-163-251-11	CERAMIC CHIP 100PF	5%	50V			C210	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V	
(KV-25C3B)													
C211	1-163-133-00	CERAMIC CHIP 470PF	5%	50V									

## A

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK		
C212	1-163-133-00	CERAMIC CHIP 470PF	5%	50V	C1036	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C213	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1039	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C214	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1040	1-164-222-11	CERAMIC CHIP 0.22MF	25V		
C215	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1041	1-164-222-11	CERAMIC CHIP 0.22MF	25V		
C216	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1042	1-164-222-11	CERAMIC CHIP 0.22MF	25V	
C217	1-126-964-11	ELECT 10MF	20%	50V	C1043	1-163-251-11	CERAMIC CHIP 100PF	5%	50V
C218	1-126-964-11	ELECT 10MF	20%	50V	C1060	1-163-001-11	CERAMIC CHIP 220PF	10%	50V
C219	1-163-131-00	CERAMIC CHIP 390PF	5%	50V	C1301	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C220	1-163-131-00	CERAMIC CHIP 390PF	5%	50V	C1401	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C221	1-163-275-11	CERAMIC CHIP 0.001MF	5%	50V	C1402	1-163-231-11	CERAMIC CHIP 15PF	5%	50V
C222	1-163-275-11	CERAMIC CHIP 0.001MF	5%	50V	C1403	1-163-231-11	CERAMIC CHIP 15PF	5%	50V
C223	1-163-275-11	CERAMIC CHIP 0.001MF	5%	50V	C1404	1-164-182-11	CERAMIC CHIP 0.0033MF	10%	50V
C224	1-163-275-11	CERAMIC CHIP 0.001MF	5%	50V	C1405	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C227	1-164-337-11	CERAMIC CHIP 2.2MF	16V	C1406	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C228	1-164-337-11	CERAMIC CHIP 2.2MF	16V	C1407	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C229	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1408	1-164-182-11	CERAMIC CHIP 0.0033MF	10%	50V
C230	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1409	1-165-320-11	CERAMIC CHIP 0.47MF	10%	16V	
C231	1-163-087-00	CERAMIC CHIP 4PF	0.25PF	50V	C1413	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C232	1-163-087-00	CERAMIC CHIP 4PF	0.25PF	50V	C1414	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C233	1-163-243-11	CERAMIC CHIP 47PF	5%	50V	C1417	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C234	1-163-243-11	CERAMIC CHIP 47PF	5%	50V	C1418	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C303	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1420	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C304	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1421	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C305	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1430	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C306	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1431	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C307	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1432	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C308	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1433	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C309	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1434	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C310	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1435	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C311	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1437	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C312	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1438	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C313	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1439	1-163-087-00	CERAMIC CHIP 4PF	0.25PF	50V
C314	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1441	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C315	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1442	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C316	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1443	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C317	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1444	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C318	1-164-182-11	CERAMIC CHIP 0.0033MF	10%	50V	C1445	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C319	1-164-182-11	CERAMIC CHIP 0.0033MF	10%	50V	C1446	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C320	1-165-320-11	CERAMIC CHIP 0.47MF	10%	16V	C1447	1-165-320-11	CERAMIC CHIP 0.47MF	10%	16V
C321	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1448	1-165-320-11	CERAMIC CHIP 0.47MF	10%	16V	
C322	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1450	1-163-231-11	CERAMIC CHIP 15PF	5%	50V	
C323	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1451	1-163-231-11	CERAMIC CHIP 15PF	5%	50V	
C324	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1452	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C325	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1460	1-163-263-11	CERAMIC CHIP 330PF	5%	50V
C350	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1461	1-163-263-11	CERAMIC CHIP 330PF	5%	50V	
C351	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1462	1-163-121-00	CERAMIC CHIP 150PF	5%	50V	
C355	1-163-231-11	CERAMIC CHIP 15PF	5%	50V	C2001	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C356	1-163-231-11	CERAMIC CHIP 15PF	5%	50V	C2002	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C357	1-163-241-11	CERAMIC CHIP 39PF	5%	50V	C2004	1-164-506-11	CERAMIC CHIP 4.7MF	16V	
C1001	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C2005	1-164-506-11	CERAMIC CHIP 4.7MF	16V		
C1002	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C2007	1-163-038-91	CERAMIC CHIP 0.1MF	25V		
C1003	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C2020	1-164-222-11	CERAMIC CHIP 0.22MF	25V		
C1004	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C2021	1-164-222-11	CERAMIC CHIP 0.22MF	25V		
C1005	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C2023	1-163-038-91	CERAMIC CHIP 0.1MF	25V		
C1006	1-165-321-11	CERAMIC CHIP 0.68MF	10%	16V	C2024	1-163-251-11	CERAMIC CHIP 100PF	5%	50V
C1007	1-164-157-11	CERAMIC CHIP 0.068MF	10%	25V	C2025	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C1020	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	C2026	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C1021	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	C2028	1-163-031-11	CERAMIC CHIP 0.01MF	50V	
C1022	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	C2029	1-164-222-11	CERAMIC CHIP 0.22MF	25V	
C1035	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	C2030	1-163-251-11	CERAMIC CHIP 100PF	5%	50V

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C2031	1-164-222-11	CERAMIC CHIP 0.22MF		FL102	1-236-071-11	< ENCAPSULATED FILTER >	
C2033	1-163-251-11	CERAMIC CHIP 100PF	5%	FL103	1-236-071-11	ENCAPSULATED COMPONENT	
		< FILTER >		FL100	1-236-071-11	ENCAPSULATED COMPONENT	
CD1001	1-527-992-31	OSCILLATOR, CERAMIC (6MHZ)		FL201	1-233-764-21	FILTER	
CF200	1-409-327-00	TRAP, CERAMIC (6.5MHZ)		FL202	1-236-071-11	ENCAPSULATED COMPONENT	
		< ADAPTOR >		FL203	1-236-071-11	ENCAPSULATED COMPONENT	
CP101	1-473-953-11	ADAPTOR, IEC		FL204	1-236-071-11	ENCAPSULATED COMPONENT	
		< CONNECTOR >		FL1402	1-236-071-11	ENCAPSULATED COMPONENT	
CN101	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P		FL1403	1-236-071-11	ENCAPSULATED COMPONENT	
CN115	*1-564-524-11	PLUG, CONNECTOR 9P		FL1404	1-236-071-11	ENCAPSULATED COMPONENT	
CN117	*1-564-520-11	PLUG, CONNECTOR 5P		FL1405	1-236-071-11	ENCAPSULATED COMPONENT	
CN201	1-766-296-11	CONNECTOR, DUAL SCART		FL2001	1-236-071-11	ENCAPSULATED COMPONENT	
CN1413	1-564-523-11	PLUG, CONNECTOR 8P		FL2003	1-236-071-11	ENCAPSULATED COMPONENT	
		< IC >					
CN2012	*1-564-525-11	PLUG, CONNECTOR 10P		IC101	8-752-068-45	IC CXA18550-T6	
		< DIODE >		IC102	8-759-267-25	IC LM2940CT-9.0	
D102	8-719-158-49	DIODE RD12SB2		IC104	8-759-514-57	IC BA7046F	
D103	8-719-158-49	DIODE RD12SB2		IC201	8-759-376-56	IC MSP3400C-PS-C6-T-ND (KV-25C3A/25C3D)	
D104	8-719-158-49	DIODE RD12SB2			8-759-437-33	IC MSP3410B-PS-F7-T-ND (KV-25C3B/25C3E)	
D105	8-719-158-49	DIODE RD12SB2		IC302	8-759-439-58	IC TDA9143/N2	
D199	8-719-914-43	DIODE DAN20K		IC303	8-759-288-85	IC TDA4665T-T	
D200	8-719-158-49	DIODE RD12SB2		IC1001	8-759-442-44	IC SDA30C164-2-GEG	
D201	8-719-158-49	DIODE RD12SB2		IC1002	8-759-439-66	IC M27C4001-15C1	
D202	8-719-158-49	DIODE RD12SB2			1-750-797-11	SOCKET, PLCC ; IC1002	
D203	8-719-158-49	DIODE RD12SB2		IC1003	8-759-378-21	IC ST24C16FB6	
D204	8-719-158-49	DIODE RD12SB2		IC1004	8-759-259-18	IC MB3793-42PNF	
D205	8-719-158-49	DIODE RD12SB2		IC1401	8-759-439-58	IC TDA9143/N2	
D206	8-719-158-49	DIODE RD12SB2		IC1403	8-759-438-61	IC SDA9288X-A141	
D207	8-719-158-49	DIODE RD12SB2		IC2001	8-759-438-65	IC SDA5273-C126-GEG	
D208	8-719-158-49	DIODE RD12SB2					
D209	8-719-158-49	DIODE RD12SB2					
D210	8-719-158-49	DIODE RD12SB2		L101	1-412-751-11	INDUCTOR	18UH (KV-25C3B)
D211	8-719-158-49	DIODE RD12SB2		L321	1-412-006-31	INDUCTOR CHIP	10UH (KV-25C3A/25C3B/25C3E)
D212	8-719-158-49	DIODE RD12SB2		L1401	1-410-428-11	INDUCTOR	56UH
D213	8-719-158-49	DIODE RD12SB2					
D214	8-719-158-49	DIODE RD12SB2					
		< COIL >					
D215	8-719-158-49	DIODE RD12SB2		Q102	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D217	8-719-158-49	DIODE RD12SB2		Q103	8-729-039-67	TRANSISTOR BS883 (KV-25C3B)	
D218	8-719-158-49	DIODE RD12SB2		Q104	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-25C3B)	
D219	8-719-158-49	DIODE RD12SB2		Q106	8-729-216-22	TRANSISTOR 2SA1162-G (KV-25C3B)	
D220	8-719-158-49	DIODE RD12SB2		Q107	8-729-216-22	TRANSISTOR 2SA1162-G	
D221	8-719-158-49	DIODE RD12SB2		Q108	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D223	8-719-158-49	DIODE RD12SB2		Q109	8-729-216-22	TRANSISTOR 2SA1162-G	
D301	8-719-401-41	DIODE MA3051L-TX		Q110	8-729-038-96	TRANSISTOR IMZ1A-T109	
D1007	8-719-914-44	DIODE DAP20K		Q112	8-729-216-22	TRANSISTOR 2SA1162-G	
D1008	8-719-914-43	DIODE DAN20K		Q120	8-729-027-52	TRANSISTOR DTC124EKA-T146	
D1009	8-719-105-91	DIODE RD5.6M-B2		Q200	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D1010	8-719-105-91	DIODE RD5.6M-B2		Q205	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D1405	8-719-914-42	DIODE DA204K		Q301	8-729-920-74	TRANSISTOR 2SC2412K-QR	
		< FERRITE BEAD >		Q302	8-729-920-74	TRANSISTOR 2SC2412K-QR	
FB101	1-414-235-11	INDUCTOR, FERRITE BEAD		Q315	8-729-038-96	TRANSISTOR IMZ1A-T109	
FB102	1-414-235-11	INDUCTOR, FERRITE BEAD		Q316	8-729-038-96	TRANSISTOR IMZ1A-T109	
				Q317	8-729-038-96	TRANSISTOR IMZ1A-T109	
				Q318	8-729-920-74	TRANSISTOR 2SC2412K-QR	
				Q1001	8-729-920-74	TRANSISTOR 2SC2412K-QR	
				Q1301	8-729-216-22	TRANSISTOR 2SA1162-G	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1305	8-729-216-22	TRANSISTOR 2SA1162-G		R129	1-208-774-11	METAL CHIP	470 0.50% 1/10W (KV-25C3B)
Q1311	8-729-920-74	TRANSISTOR 2SC2412K-QR		R130	1-216-039-00	METAL GLAZE	390 5% 1/10W
Q1312	8-729-920-74	TRANSISTOR 2SC2412K-QR		R131	1-216-039-00	METAL GLAZE	390 5% 1/10W
Q1401	8-729-038-96	TRANSISTOR IMZ1A-T109		R132	1-216-089-91	METAL GLAZE	47K 5% 1/10W
Q1402	8-729-038-96	TRANSISTOR IMZ1A-T109		R133	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
Q1403	8-729-038-96	TRANSISTOR IMZ1A-T109		R134	1-216-089-91	METAL GLAZE	47K 5% 1/10W
Q1404	8-729-920-74	TRANSISTOR 2SC2412K-QR		R135	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
Q1411	8-729-920-74	TRANSISTOR 2SC2412K-QR		R136	1-216-022-00	METAL GLAZE	75 5% 1/10W
Q1412	8-729-920-74	TRANSISTOR 2SC2412K-QR		R137	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q2005	8-729-920-74	TRANSISTOR 2SC2412K-QR		R138	1-216-022-00	METAL GLAZE	75 5% 1/10W
Q2006	8-729-027-59	TRANSISTOR DTC144EKA-T146		R139	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q2007	8-729-027-59	TRANSISTOR DTC144EKA-T146		R141	1-216-033-00	METAL GLAZE	220 5% 1/10W
		< RESISTOR >		R142	1-216-033-00	METAL GLAZE	220 5% 1/10W
D2001	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R143	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR201	1-216-295-91	METAL GLAZE	0 5% 1/10W	R144	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR202	1-216-295-91	METAL GLAZE	0 5% 1/10W	R146	1-216-033-00	METAL GLAZE	220 5% 1/10W
JR301	1-216-295-91	METAL GLAZE	0 5% 1/10W	R148	1-208-774-11	METAL CHIP	470 0.50% 1/10W (KV-25C3B)
JR302	1-216-295-91	METAL GLAZE	0 5% 1/10W	R149	1-216-073-00	METAL GLAZE	10K 5% 1/10W (KV-25C3B)
JR303	1-216-295-91	METAL GLAZE	0 5% 1/10W	R151	1-208-774-11	METAL CHIP	470 0.50% 1/10W (KV-25C3B)
JR1001	1-216-295-91	METAL GLAZE	0 5% 1/10W	R152	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
JR1002	1-216-295-91	METAL GLAZE	0 5% 1/10W	R153	1-216-311-00	METAL GLAZE	6.8 5% 1/10W
JR1003	1-216-295-91	METAL GLAZE	0 5% 1/10W	R154	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
JR1004	1-216-295-91	METAL GLAZE	0 5% 1/10W	R156	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W (KV-25C3B)
JR1006	1-216-295-91	METAL GLAZE	0 5% 1/10W	R157	1-216-025-91	METAL GLAZE	100 5% 1/10W (KV-25C3B)
JR1008	1-216-295-91	METAL GLAZE	0 5% 1/10W	R159	1-216-304-11	METAL GLAZE	3.3 5% 1/10W
JR1009	1-216-295-91	METAL GLAZE	0 5% 1/10W	R160	1-216-039-00	METAL GLAZE	390 5% 1/10W
JR1010	1-216-295-91	METAL GLAZE	0 5% 1/10W	R162	1-216-089-91	METAL GLAZE	47K 5% 1/10W
JR1011	1-216-295-91	METAL GLAZE	0 5% 1/10W	R163	1-216-039-00	METAL GLAZE	390 5% 1/10W
JR1301	1-216-295-91	METAL GLAZE	0 5% 1/10W	R166	1-216-039-00	METAL GLAZE	390 5% 1/10W
JR1302	1-216-295-91	METAL GLAZE	0 5% 1/10W	R167	1-216-039-00	METAL GLAZE	390 5% 1/10W
JR1402	1-216-295-91	METAL GLAZE	0 5% 1/10W	R168	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
JR1403	1-216-295-91	METAL GLAZE	0 5% 1/10W	R169	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R101	1-216-061-00	METAL GLAZE	3.3K 5% 1/8W	R170	1-216-021-00	METAL GLAZE	68 5% 1/10W
R102	1-216-025-91	METAL GLAZE	100 5% 1/10W	R171	1-216-021-00	METAL GLAZE	68 5% 1/10W
R103	1-216-025-91	METAL GLAZE	100 5% 1/10W	R172	1-216-021-00	METAL GLAZE	68 5% 1/10W
R104	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R173	1-216-021-00	METAL GLAZE	68 5% 1/10W
R106	1-216-033-00	METAL GLAZE	220 5% 1/10W	R174	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R107	1-216-295-91	METAL GLAZE	0 5% 1/10W	R175	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R108	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R176	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R109	1-216-085-00	METAL GLAZE	33K 5% 1/10W	R177	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R110	1-216-097-91	METAL GLAZE	100K 5% 1/10W	R178	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R111	1-216-041-00	METAL GLAZE	470 5% 1/10W	R179	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R112	1-216-041-00	METAL GLAZE	470 5% 1/10W	R180	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R113	1-216-041-00	METAL GLAZE	470 5% 1/10W	R181	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R114	1-216-311-00	METAL GLAZE	6.8 5% 1/10W	R182	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R115	1-216-311-00	METAL GLAZE	6.8 5% 1/10W	R183	1-216-033-00	METAL GLAZE	220 5% 1/10W
R116	1-216-311-00	METAL GLAZE	6.8 5% 1/10W	R184	1-216-033-00	METAL GLAZE	220 5% 1/10W
R117	1-216-022-00	METAL GLAZE	75 5% 1/10W	R185	1-216-033-00	METAL GLAZE	220 5% 1/10W
R118	1-216-022-00	METAL GLAZE	75 5% 1/10W	R186	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R119	1-216-022-00	METAL GLAZE	75 5% 1/10W	R187	1-216-107-00	METAL GLAZE	270K 5% 1/10W
R120	1-216-022-00	METAL GLAZE	75 5% 1/10W	R188	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R121	1-216-022-00	METAL GLAZE	75 5% 1/10W	R189	1-218-755-11	METAL CHIP	130K 0.50% 1/10W
R122	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R190	1-216-075-00	METAL GLAZE	12K 5% 1/10W
R123	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R191	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R124	1-216-113-00	METAL GLAZE	470K 5% 1/10W				
R126	1-216-039-00	METAL GLAZE	390 5% 1/10W				
R127	1-216-039-00	METAL GLAZE	390 5% 1/10W				
R128	1-216-113-00	METAL GLAZE	470K 5% 1/10W				

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R192	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1047	1-216-009-00	METAL GLAZE	22 5% 1/10W
R193	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1048	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R194	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1050	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R195	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1051	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R196	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1052	1-216-037-00	METAL GLAZE	330 5% 1/10W
R197	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1053	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R198	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1056	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R199	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1059	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R200	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1060	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R201	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1061	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R202	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R1062	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R203	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R1063	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R204	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1064	1-247-839-11	CARBON	2.2K 5% 1/4W
R205	1-216-037-00	METAL GLAZE	330 5% 1/10W	R1070	1-216-025-91	METAL GLAZE	100 5% 1/10W
R207	1-216-039-00	METAL GLAZE	390 5% 1/10W	R1071	1-216-025-91	METAL GLAZE	100 5% 1/10W
R208	1-216-039-00	METAL GLAZE	390 5% 1/10W	R1075	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R213	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1301	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R214	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1302	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R215	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1303	1-216-037-00	METAL GLAZE	330 5% 1/10W
R272	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1304	1-216-037-00	METAL GLAZE	330 5% 1/10W
R311	1-216-095-00	METAL GLAZE	82K 5% 1/10W	R1325	1-216-009-00	METAL GLAZE	22 5% 1/10W
R312	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R1340	1-216-037-00	METAL GLAZE	330 5% 1/10W
R313	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1341	1-216-017-91	METAL GLAZE	47 5% 1/10W
R314	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1342	1-216-017-91	METAL GLAZE	47 5% 1/10W
R315	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1344	1-216-037-00	METAL GLAZE	330 5% 1/10W
R317	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1401	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R330	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1402	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R331	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1403	1-216-025-91	METAL GLAZE	100 5% 1/10W
R332	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1404	1-216-025-91	METAL GLAZE	100 5% 1/10W
R333	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1406	1-216-037-00	METAL GLAZE	330 5% 1/10W
R334	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1407	1-216-037-00	METAL GLAZE	330 5% 1/10W
R335	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1410	1-216-041-00	METAL GLAZE	470 5% 1/10W
R336	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1411	1-216-041-00	METAL GLAZE	470 5% 1/10W
R337	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1412	1-216-041-00	METAL GLAZE	470 5% 1/10W
R338	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1413	1-216-041-00	METAL GLAZE	470 5% 1/10W
R340	1-216-017-91	METAL GLAZE	47 5% 1/10W	R1414	1-216-041-00	METAL GLAZE	470 5% 1/10W
R341	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1415	1-216-041-00	METAL GLAZE	470 5% 1/10W
R342	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1416	1-216-041-00	METAL GLAZE	470 5% 1/10W
R343	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1417	1-216-041-00	METAL GLAZE	470 5% 1/10W
R345	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1418	1-216-041-00	METAL GLAZE	470 5% 1/10W
R351	1-216-037-00	METAL GLAZE	330 5% 1/10W	R1420	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R352	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1421	1-216-047-91	METAL GLAZE	820 5% 1/10W
R353	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1422	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R374	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1423	1-216-045-00	METAL GLAZE	680 5% 1/10W
R1001	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1424	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R1011	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1425	1-216-047-91	METAL GLAZE	820 5% 1/10W
R1012	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1430	1-216-025-91	METAL GLAZE	100 5% 1/10W
R1030	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1431	1-216-025-91	METAL GLAZE	100 5% 1/10W
R1033	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1433	1-216-043-91	METAL GLAZE	560 5% 1/10W
R1034	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1434	1-216-043-91	METAL GLAZE	560 5% 1/10W
R1036	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1435	1-216-043-91	METAL GLAZE	560 5% 1/10W
R1037	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1436	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R1038	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1440	1-216-037-00	METAL GLAZE	330 5% 1/10W
R1039	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1441	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R1040	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1442	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R1041	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1450	1-216-029-00	METAL GLAZE	150 5% 1/10W
R1042	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1451	1-216-029-00	METAL GLAZE	150 5% 1/10W
R1044	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1452	1-216-029-00	METAL GLAZE	150 5% 1/10W
R1045	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1461	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R1046	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1462	1-216-049-91	METAL GLAZE	1K 5% 1/10W

**A AN G**

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
R2001	1-216-025-91	METAL GLAZE	100 5%	1/10W	*A-1636-021-A	G BOARD, COMPLETE	*****	
R2002	1-216-049-91	METAL GLAZE	1K 5%	1/10W				
R2020	1-216-041-00	METAL GLAZE	470 5%	1/10W				
R2021	1-216-073-00	METAL GLAZE	10K 5%	1/10W	*4-203-609-01	HOLDER, G		
R2022	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W				
						< CAPACITOR >		
R2023	1-216-063-91	METAL GLAZE	3.9K 5%	1/10W				
R2024	1-216-049-91	METAL GLAZE	1K 5%	1/10W	C602	1-165-127-11	CERAMIC	470PF 10% 500V
R2025	1-216-025-91	METAL GLAZE	100 5%	1/10W	C603	1-165-127-11	CERAMIC	470PF 10% 500V
R2026	1-216-025-91	METAL GLAZE	100 5%	1/10W	C604	1-136-171-00	FILM	0.33MF 5% 50V
R2027	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C605	1-137-399-11	FILM	0.1MF 5% 50V
				C606	1-136-171-00	FILM	0.33MF 5% 50V	
R2028	1-216-009-00	METAL GLAZE	22 5%	1/10W				
R2031	1-216-017-91	METAL GLAZE	47 5%	1/10W	C607	1-137-399-11	FILM	0.1MF 5% 50V
R2032	1-216-017-91	METAL GLAZE	47 5%	1/10W	C608	1-164-625-11	CERAMIC	680PF 10% 500V
R2033	1-216-017-91	METAL GLAZE	47 5%	1/10W	C609	1-129-718-00	FILM	0.022MF 5% 630V
R2034	1-216-295-91	METAL GLAZE	0 5%	1/10W	C610	1-126-953-11	ELECT	2200MF 20% 35V
				C611	1-126-953-11	ELECT	2200MF 20% 35V	
R2035	1-216-017-91	METAL GLAZE	47 5%	1/10W				
R2037	1-216-049-91	METAL GLAZE	1K 5%	1/10W	C612	1-124-903-11	ELECT	1MF 20% 50V
R2040	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C613	1-128-548-11	ELECT	4700MF 20% 25V
R2041	1-216-025-91	METAL GLAZE	100 5%	1/10W	C614	1-128-548-11	ELECT	4700MF 20% 25V
				C615	1-110-626-11	ELECT	330MF 20% 160V	
				C616	1-164-625-11	CERAMIC	680PF 10% 500V	
						< TUNER >		
TU101	1-693-338-11	TUNER (TUVIF) (AEP)			C617	1-136-559-11	NYLAR	0.0047MF 10% 400V
		(KV-25C3A/25C3D/25C3E)		C618	1-104-989-91	FILM	0.0022MF 5% 200V	
	1-693-340-11	TUNER (TUVIF) (FR) (KV-25C3B)		C621	△ 1-136-519-12	FILM	0.47MF 20% 300V	
				C622	△ 1-136-518-12	FILM	0.33MF 20% 300V	
				C624	△ 1-113-890-61	CERAMIC	0.0022MF 20% 250V	
						< CRYSTAL >		
X200	1-760-628-11	VIBRATOR, CRYSTAL (18.432MHz)			C626	△ 1-164-503-61	CERAMIC	0.0022MF 20% 400V
X301	1-567-505-11	OSCILLATOR, CRYSTAL (3.58MHz)			C627	1-126-940-11	ELECT	330MF 20% 25V
X302	1-567-504-11	OSCILLATOR, CRYSTAL (4.43MHz)			C628	1-126-965-11	ELECT	22MF 20% 50V
XI001	1-760-551-21	VIBRATOR, CERAMIC (20.48MHz)			C629	1-162-599-12	CERAMIC	0.0047MF 250V
XI401	1-567-505-11	OSCILLATOR, CRYSTAL (3.58MHz)			C630	1-162-599-12	CERAMIC	0.0047MF 250V
XI402	1-567-504-11	OSCILLATOR, CRYSTAL (4.43MHz)						
XI403	1-760-551-21	VIBRATOR, CERAMIC (20.48MHz)			C631	△ 1-161-964-91	CERAMIC	0.0047MF 250V
				C633	1-125-555-11	ELECT	330MF 20% 400V	
				C635	1-136-165-00	FILM	0.1MF 5% 50V	
				C636	1-136-165-00	FILM	0.1MF 5% 50V	
				C637	1-126-964-11	ELECT	10MF 20% 50V	
						< AN BOARD, COMPLETE >		
				C648	1-101-001-00	CERAMIC	0.001MF 50V	
				C650	1-126-964-11	ELECT	10MF 20% 50V	
				C651	1-136-171-00	FILM	0.33MF 5% 50V	
				C662	1-126-943-11	ELECT	2200MF 20% 25V	
				C663	1-126-964-11	ELECT	10MF 20% 50V	
						< CONNECTOR >		
C1061	1-164-505-11	CERAMIC CHIP 2.2MF		16V	C664	1-102-129-00	CERAMIC	0.01MF 10% 50V
				C665	1-126-940-11	ELECT	330MF 20% 25V	
						< CONNECTOR >		
CN1013	*1-564-507-11	PLUG, CONNECTOR 4P						
						< DIODE >		
				CN0008	△ 1-508-786-11	PIN, CONNECTOR (5MM PITCH)	2P	
D1012	8-719-991-43	DIODE DAN202K			CN0009	△ 1-508-765-11	PIN, CONNECTOR (5MM PITCH)	3P
				CN0701	1-573-299-21	CONNECTOR, BOARD TO BOARD	10P	
				CN0702	1-695-300-11	CONNECTOR, BOARD TO BOARD	20P	
				CN0703	△ *1-691-291-11	PIN, CONNECTOR (PC BOARD)	5P	
						< DIODE >		
IC1006	8-759-988-13	IC LM393PS						
						< TRANSISTOR >		
Q1015	8-729-900-53	TRANSISTOR DTC114EK			D601	8-719-510-53	DIODE D4SB60L	
				D602	8-719-991-33	DIODE 1SS133T-77		
				D603	8-719-109-89	DIODE RD5.6RSB2		
				D605	8-719-047-31	DIODE RBA-402L		
				D607	8-719-510-12	DIODE D10SC4M		
					4-382-854-11	SCREW (M3X10), P, SW (+) ; D607		
						< RESISTOR >		
R1076	1-216-073-00	METAL GLAZE	10K 5%	1/10W	D608	8-719-510-12	DIODE D10SC4M	
R1077	1-216-073-00	METAL GLAZE	10K 5%	1/10W		4-382-854-11	SCREW (M3X10), P, SW (+) ; D608	
R1078	1-216-073-00	METAL GLAZE	10K 5%	1/10W				
R1079	1-216-075-00	METAL GLAZE	12K 5%	1/10W	D609	8-719-047-31	DIODE RBA-402L	



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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D610	8-719-312-39	DIODE R2X-V1		Q621	8-729-200-21	TRANSISTOR 2SC2500-B	
D611	8-719-510-64	DIODE S2LA20F				< RESISTOR >	
D614	8-719-911-19	DIODE 1SS119-25		R601	1-202-933-61	FUSIBLE	0.1 10% 1/2W F
D615	8-719-911-19	DIODE 1SS119-25		R602	1-247-891-00	CARBON	330K 5% 1/4W
D616	8-719-911-19	DIODE 1SS119-25		R603	1-247-891-00	CARBON	330K 5% 1/4W
D617	8-719-911-19	DIODE 1SS119-25		R604	1-216-369-00	METAL OXIDE	1 5% 2W F
D618	8-719-911-19	DIODE 1SS119-25		R605	1-247-891-00	CARBON	330K 5% 1/4W
D619	8-719-911-19	DIODE 1SS119-25		R606	1-247-891-00	CARBON	330K 5% 1/4W
D620	8-719-911-19	DIODE 1SS119-25		R607	1-216-369-00	METAL OXIDE	1 5% 2W F
D621	8-719-911-19	DIODE 1SS119-25		R608	1-247-887-00	CARBON	220K 5% 1/4W
D622	8-719-510-64	DIODE S2LA20F		R609	1-249-429-11	CARBON	10K 5% 1/4W F
D623	8-719-510-64	DIODE S2LA20F		R610	1-249-419-11	CARBON	1.5K 5% 1/4W F
D625	8-719-911-19	DIODE 1SS119-25		R611	1-249-377-11	CARBON	0.47 5% 1/4W F
D626	8-719-911-19	DIODE 1SS119-25		R614	1-247-807-31	CARBON	100 5% 1/4W
D627	8-719-911-19	DIODE 1SS119-25		R616	$\triangle$ 1-205-949-11	WIREWOUND	1.8 5% 10W
D628	8-719-911-19	DIODE 1SS119-25		R617	$\triangle$ 1-205-949-11	WIREWOUND	1.8 5% 10W
D629	8-719-991-33	DIODE 1SS133T-77		R619	$\triangle$ 1-244-945-91	CARBON	1M 5% 1/2W
D630	8-719-991-33	DIODE 1SS133T-77		R620	$\triangle$ 1-218-265-11	METAL	8.2M 5% 1W
D633	8-719-991-33	DIODE 1SS133T-77		R621	1-249-417-11	CARBON	1K 5% 1/4W F
D634	8-719-510-64	DIODE S2LA20F		R622	1-249-430-11	CARBON	12K 5% 1/4W
D635	8-719-991-33	DIODE 1SS133T-77		R623	1-249-436-11	CARBON	39K 5% 1/4W
D636	8-719-511-40	DIODE S1VB40		R624	1-249-425-11	CARBON	4.7K 5% 1/4W
<b>&lt; FERRITE BEAD &gt;</b>							
FB601	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R625	1-247-815-91	CARBON	220 5% 1/4W
FB602	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R626	1-247-863-91	CARBON	22K 5% 1/4W
FB603	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R627	1-247-815-91	CARBON	220 5% 1/4W
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R628	1-247-807-31	CARBON	100 5% 1/4W
<b>&lt; IC &gt;</b>							
IC601	1-810-051-11	POWER MODULE DM-48		R629	1-249-428-11	CARBON	8.2K 5% 1/4W
IC602	$\triangle$ 8-749-010-64	PHOTO COUPLER PC123FY2		R636	1-207-905-00	WIREWOUND	0.27 10% 2W F
IC603	8-759-510-52	IC TEA7605		R637	1-249-389-11	CARBON	4.7 5% 1/4W F
<b>&lt; COIL &gt;</b>							
I605	1-412-523-11	INDUCTOR 6.8UH		R639	1-247-791-91	CARBON	22 5% 1/4W
I606	1-412-523-11	INDUCTOR 6.8UH		R640	1-247-791-91	CARBON	22 5% 1/4W
<b>&lt; TRANSFORMER &gt;</b>							
LF602	$\triangle$ 1-429-860-11	TRANSFORMER, LINE FILTER		R641	1-247-791-91	CARBON	22 5% 1/4W
<b>&lt; IC LINK &gt;</b>							
PS601	$\triangle$ 1-801-550-21	PROTECTOR MODULE 2.5A/MP250		R642	1-247-791-91	CARBON	22 5% 1/4W
PS602	$\triangle$ 1-801-550-21	PROTECTOR MODULE 2.5A/MP250		R651	1-215-880-00	METAL OXIDE	10 5% 2W F
PS604	$\triangle$ 1-801-550-21	PROTECTOR MODULE 2.5A/MP250		R652	1-247-891-00	CARBON	330K 5% 1/4W
PS605	$\triangle$ 1-801-549-21	PROTECTOR MODULE 4.0A/MP400		R653	1-247-891-00	CARBON	330K 5% 1/4W
<b>&lt; TRANSISTOR &gt;</b>							
Q601	8-729-032-87	TRANSISTOR 2SC4834NP-F09		R654	1-247-891-00	CARBON	330K 5% 1/4W
	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q601		R655	1-247-891-00	CARBON	330K 5% 1/4W
Q602	8-729-032-87	TRANSISTOR 2SC4834NP-F09		R656	1-249-439-11	CARBON	68K 5% 1/4W
	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q602		R657	1-249-429-11	CARBON	10K 5% 1/4W
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE		R658	1-249-421-11	CARBON	2.2K 5% 1/4W
	8-729-200-21	TRANSISTOR 2SC2500-B		R659	1-249-425-11	CARBON	4.7K 5% 1/4W
Q604	8-729-200-21	TRANSISTOR 2SC2500-B		R660	1-249-429-11	CARBON	10K 5% 1/4W
Q605	8-729-200-21	TRANSISTOR 2SC2500-B		R661	1-249-421-11	CARBON	2.2K 5% 1/4W
Q608	8-729-200-21	TRANSISTOR 2SC2500-B		R662	1-249-421-11	CARBON	2.2K 5% 1/4W
Q610	8-729-119-76	TRANSISTOR 2SA1175-HFE		R663	1-249-429-11	CARBON	10K 5% 1/4W
Q611	8-729-119-78	TRANSISTOR 2SC1740S-RT		R664	1-249-429-11	CARBON	10K 5% 1/4W
Q612	8-729-119-76	TRANSISTOR 2SA1175-HFE		R667	1-249-377-11	CARBON	0.47 5% 1/4W F
Q615	8-729-200-21	TRANSISTOR 2SC2500-B		R670	1-249-421-11	CARBON	2.2K 5% 1/4W F
<b>&lt; RELAY &gt;</b>							
RY601	$\triangle$ 1-755-167-11	RELAY, AC POWER					
RY602	$\triangle$ 1-755-167-11	RELAY, AC POWER					
<b>&lt; TRANSFORMER &gt;</b>							
T601	$\triangle$ 1-429-844-11	TRANSFORMER, CONVERTER (PIT)					
T602	$\triangle$ 1-429-254-11	TRANSFORMER, CONVERTER (PRT)					
T603	$\triangle$ 1-429-952-11	TRANSFORMER					

**G** **C**

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Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
<b>&lt; THERMISTOR &gt;</b>								
<b>TEP601 ▲ 1-809-827-11 THERMISTOR, POSITIVE</b>								
<b>&lt; VARISTOR &gt;</b>								
VDR601	1-810-977-21	VARISTOR ERZV10D621		Q3701	8-729-906-70	TRANSISTOR BF871-127		
*****								
<b>*A-1638-097-A C BOARD, COMPLETE</b>								
*****								
<b>4-382-854-11 SCREW (M3X10), P, SW (+)</b>								
<b>&lt; CAPACITOR &gt;</b>								
C3701	1-162-114-00	CERAMIC	0.0047MF	2KV	Q3706	8-729-326-11	TRANSISTOR 2SC2611	
C3703	1-107-662-11	ELECT	22MF	20%	Q3702	8-729-906-70	TRANSISTOR BF871-127	
C3712	1-102-978-00	CERAMIC	220PF	5%	Q3703	8-729-906-70	TRANSISTOR BF871-127	
C3713	1-102-978-00	CERAMIC	220PF	5%	Q3704	8-729-326-11	TRANSISTOR 2SC2611	
C3714	1-102-978-00	CERAMIC	220PF	5%	Q3705	8-729-326-11	TRANSISTOR 2SC2611	
C3716	1-128-528-11	ELECT	470MF	20%	Q3706	8-729-326-11	TRANSISTOR 2SC2611	
C3720	1-162-116-00	CERAMIC	680PF	10%	Q3707	8-729-200-17	TRANSISTOR 2SA1091-O	
*****								
<b>&lt; CONNECTOR &gt;</b>								
CN3701	1-695-915-11	TAB (CONTACT)		R3708	1-202-884-11	SOLID	820K 20% 1/2W	
CN3703	*1-564-512-11	PLUG, CONNECTOR 9P		R3709	1-202-884-11	SOLID	820K 20% 1/2W	
CN3704	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P		R3703	1-202-549-00	SOLID	100 20% 1/2W	
*****								
<b>&lt; DIODE &gt;</b>								
D3701	8-719-991-33	DIODE 1SS133T-77		R3705	1-216-349-00	METAL OXIDE	1 5% 1W F	
D3702	8-719-991-33	DIODE 1SS133T-77		R3706	1-216-349-00	METAL OXIDE	1 5% 1W F	
D3703	8-719-991-33	DIODE 1SS133T-77		R3707	1-249-416-11	CARBON	820 5% 1/4W	
D3704	8-719-991-33	DIODE 1SS133T-77		R3708	1-249-416-11	CARBON	820 5% 1/4W	
D3705	8-719-991-33	DIODE 1SS133T-77		R3709	1-249-416-11	CARBON	820 5% 1/4W	
D3706	8-719-991-33	DIODE 1SS133T-77		R3710	1-215-922-11	METAL OXIDE	6.8K 5% 3W F	
D3707	8-719-991-33	DIODE 1SS133T-77		R3711	1-202-549-00	SOLID	100 20% 1/2W	
D3708	8-719-991-33	DIODE 1SS133T-77		R3712	1-215-922-11	METAL OXIDE	6.8K 5% 3W F	
D3709	8-719-991-33	DIODE 1SS133T-77		R3713	1-202-549-00	SOLID	100 20% 1/2W	
D3710	8-719-908-03	DIODE GP08D		R3714	1-215-922-11	METAL OXIDE	6.8K 5% 3W F	
D3711	8-719-901-83	DIODE 1SS83		R3715	1-202-549-00	SOLID	100 20% 1/2W	
D3712	8-719-901-83	DIODE 1SS83		R3716	1-249-405-11	CARBON	100 5% 1/4W F	
D3713	8-719-901-83	DIODE 1SS83		R3717	1-249-405-11	CARBON	100 5% 1/4W F	
D3714	8-719-991-33	DIODE 1SS133T-77		R3718	1-249-405-11	CARBON	100 5% 1/4W F	
D3715	8-719-018-82	DIODE RGP02-20EL-6394		R3721	1-247-885-00	CARBON	180K 5% 1/4W	
D3716	8-719-991-33	DIODE 1SS133T-77		R3723	1-247-885-00	CARBON	180K 5% 1/4W	
D3717	8-719-991-33	DIODE 1SS133T-77		R3725	1-249-419-11	CARBON	1.5K 5% 1/4W	
D3718	8-719-991-33	DIODE 1SS133T-77		R3726	1-249-419-11	CARBON	1.5K 5% 1/4W	
D3719	8-719-991-33	DIODE 1SS133T-77		R3727	1-249-419-11	CARBON	1.5K 5% 1/4W	
<b>&lt; CRT SOCKET &gt;</b>								
J3701 ▲ 1-526-990-21	SOCKET, CRT			R3728	1-247-815-91	CARBON	220 5% 1/4W	
<b>&lt; COIL &gt;</b>								
L3701	1-408-607-31	INDUCTOR	22UH	R3729	1-247-815-91	CARBON	220 5% 1/4W	
L3702	1-408-607-31	INDUCTOR	22UH	R3730	1-247-815-91	CARBON	220 5% 1/4W	
L3703	1-408-409-00	INDUCTOR	10UH	R3731	1-249-403-11	CARBON	68 5% 1/4W	
L3704	1-408-607-31	INDUCTOR	22UH	R3732	1-249-403-11	CARBON	68 5% 1/4W	
L3705	1-408-409-00	INDUCTOR	10UH	R3733	1-249-403-11	CARBON	68 5% 1/4W	
L3706	1-408-607-31	INDUCTOR	22UH	R3734	1-202-549-00	SOLID	100 20% 1/2W	
L3707	1-408-409-00	INDUCTOR	10UH	R3735	1-247-885-00	CARBON	180K 5% 1/4W	
L3708	1-412-528-11	INDUCTOR	18UH	R3738	1-249-401-11	CARBON	47 5% 1/4W	
*****								
<b>&lt; TRANSISTOR &gt;</b>								
Q3701	8-729-906-70	TRANSISTOR BF871-127		R3739	1-249-401-11	CARBON	47 5% 1/4W	
Q3702	8-729-906-70	TRANSISTOR BF871-127		R3740	1-249-401-11	CARBON	47 5% 1/4W	
Q3703	8-729-906-70	TRANSISTOR BF871-127		R3741	1-249-435-11	CARBON	33K 5% 1/4W	
Q3704	8-729-326-11	TRANSISTOR 2SC2611		R3742	1-249-429-11	CARBON	10K 5% 1/4W	
Q3705	8-729-326-11	TRANSISTOR 2SC2611		R3743	1-249-430-11	CARBON	12K 5% 1/4W	
*****								
<b>&lt; RESISTOR &gt;</b>								
R3701	1-202-884-11	SOLID	820K 20%	R3744	1-216-437-00	METAL OXIDE	5.6K 5% 1W F	
R3702	1-202-884-11	SOLID	820K 20%	R3745	1-247-885-00	CARBON	180K 5% 1/4W	
R3703	1-202-549-00	SOLID	100 20%	R3746	1-247-815-91	CARBON	220 5% 1/4W	
R3705	1-216-349-00	METAL OXIDE	1 5%	R3747	1-216-437-00	METAL OXIDE	5.6K 5% 1W F	
R3706	1-216-349-00	METAL OXIDE	1 5%	R3748	1-247-885-00	CARBON	180K 5% 1/4W	
*****								
<b>&lt; COIL &gt;</b>								
L3701	1-408-607-31	INDUCTOR	22UH	R3749	1-216-437-00	METAL OXIDE	5.6K 5% 1W F	
L3702	1-408-607-31	INDUCTOR	22UH					
L3703	1-408-409-00	INDUCTOR	10UH					
L3704	1-408-607-31	INDUCTOR	22UH					
L3705	1-408-409-00	INDUCTOR	10UH					
L3706	1-408-607-31	INDUCTOR	22UH					
L3707	1-408-409-00	INDUCTOR	10UH					
L3708	1-412-528-11	INDUCTOR	18UH					

C	D
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REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK			
R3750	1-249-432-11	CARBON	18K	5%	1/4W		C666	1-104-661-91	ELECT	330MF	20%	16V
R3751	1-216-437-00	METAL OXIDE	5.6K	5%	1W	F	C667	1-136-165-00	FILM	0.1MF	5%	50V
R3752	1-249-431-11	CARBON	15K	5%	1/4W		C668	1-136-165-00	FILM	0.1MF	5%	50V
R3758	1-247-807-31	CARBON	100	5%	1/4W		C669	1-136-165-00	FILM	0.1MF	5%	50V
R3759	1-247-807-31	CARBON	100	5%	1/4W		C670	1-136-165-00	FILM	0.1MF	5%	50V
R3760	1-247-807-31	CARBON	100	5%	1/4W		C671	1-136-165-00	FILM	0.1MF	5%	50V
R3761	1-249-418-11	CARBON	1.2K	5%	1/4W		C801	1-123-024-21	ELECT	33MF	10%	160V
R3762	1-249-418-11	CARBON	1.2K	5%	1/4W		C802	1-136-207-11	FILM	0.047MF	10%	250V
R3763	1-249-418-11	CARBON	1.2K	5%	1/4W		C804	1-102-110-00	CERAMIC	220PF	10%	50V
							C805	1-102-212-00	CERAMIC	820PF	10%	500V
< VARIABLE RESISTOR >							C808	1-162-116-00	CERAMIC	680PF	10%	2KV
RV3701 1-230-641-11 RES, ADJ, METAL GLAZE 2.2M							C809	1-162-116-00	CERAMIC	680PF	10%	2KV
RV3702 1-241-714-11 RES, ADJ, METAL FILM 110M							C810	1-136-558-11	FILM	0.0039MF	10%	400V
							C811	1-113-582-11	FILM	0.017MF	3%	2KV
							C812	1-129-722-00	FILM	0.047MF	5%	630V
*****												
*A-1640-247-A D BOARD, COMPLETE							C813	1-110-969-11	FILM	0.89MF	5%	400V
							C814	1-129-702-00	FILM	0.001MF	10%	400V
							C816	1-110-486-11	FILM	1MF	5%	400V
							C817	1-136-759-11	FILM	0.039MF	5%	630V
							C819	1-136-207-11	FILM	0.047MF	10%	250V
< CAPACITOR >												
C101	1-126-965-11	ELECT	22MF	20%	50V		C822	1-126-967-11	ELECT	47MF	20%	50V
C236	1-136-165-00	FILM	0.1MF	5%	50V		C823	1-102-129-00	CERAMIC	0.01MF	10%	50V
C237	1-136-165-00	FILM	0.1MF	5%	50V		C824	1-162-117-00	CERAMIC	100PF	10%	500V
C238	1-126-967-11	ELECT	47MF	20%	16V		C825	1-126-964-11	ELECT	10MF	20%	50V
C241	1-126-967-11	ELECT	47MF	20%	16V		C827	1-102-228-00	CERAMIC	470PF	10%	500V
C242	1-126-953-11	ELECT	2200MF	20%	35V		C835	1-107-655-11	ELECT	47MF	20%	250V
C243	1-136-165-00	FILM	0.1MF	5%	50V		C836	1-102-228-00	CERAMIC	470PF	10%	500V
C244	1-126-953-11	ELECT	2200MF	20%	35V		C837	1-102-228-00	CERAMIC	470PF	10%	500V
C245	1-136-165-00	FILM	0.1MF	5%	50V		C838	1-102-228-00	CERAMIC	470PF	10%	500V
C260	1-126-964-11	ELECT	10MF	20%	50V		C841	1-106-375-12	MYLAR	0.022MF	10%	250V
C261	1-126-964-11	ELECT	10MF	20%	50V		C851	1-129-702-00	FILM	0.001MF	10%	630V
C262	1-104-665-11	ELECT	100MF	20%	25V		C852	1-126-968-11	ELECT	100MF	20%	50V
C263	1-136-165-00	FILM	0.1MF	5%	50V		C854	1-102-129-00	CERAMIC	0.01MF	10%	50V
C264	1-126-933-11	ELECT	100MF	20%	16V		C855	1-126-941-11	ELECT	470MF	20%	25V
C265	1-136-165-00	FILM	0.1MF	5%	50V		C856	1-102-129-00	CERAMIC	0.01MF	10%	50V
C266	1-104-665-11	ELECT	100MF	20%	25V		C857	1-126-941-11	ELECT	470MF	20%	25V
C269	1-126-967-11	ELECT	47MF	20%	16V		C860	1-106-220-00	MYLAR	0.1MF	10%	100V
C270	1-136-165-00	FILM	0.1MF	5%	50V		C861	1-137-423-11	MYLAR	0.15MF	10%	100V
C271	1-126-965-11	ELECT	22MF	20%	50V		C862	1-130-789-00	FILM	1MF	5%	100V
C272	1-136-165-00	FILM	0.1MF	5%	50V		C866	1-137-040-11	FILM	0.0022MF	10%	400V
C273	1-136-161-00	FILM	0.047MF	5%	50V		C867	1-107-909-11	ELECT	47MF	20%	50V
C274	1-124-925-11	ELECT	2.2MF	20%	50V		C871	1-136-562-11	MYLAR	0.0082MF	20%	400V
C275	1-124-925-11	ELECT	2.2MF	20%	50V		C873	1-162-134-11	CERAMIC	470PF	10%	2KV
C276	1-126-967-11	ELECT	47MF	20%	16V		C874	1-164-645-11	CERAMIC	1000PF	10%	500V
C277	1-126-934-11	ELECT	220MF	20%	16V		C876	1-136-298-00	FILM	0.0033MF	5%	100V
C278	1-107-714-11	ELECT	10MF	20%	16V		C894	1-102-978-00	CERAMIC	220PF	5%	50V
C279	1-126-965-11	ELECT	22MF	20%	50V		C900	1-101-810-00	CERAMIC	100PF	5%	500V
C280	1-136-169-00	FILM	0.22MF	5%	50V		C901	1-101-810-00	CERAMIC	100PF	5%	500V
C281	1-126-967-11	ELECT	47MF	20%	16V		C902	1-137-372-11	FILM	0.022MF	5%	50V
C283	1-136-169-00	FILM	0.22MF	5%	50V		C903	1-137-372-11	FILM	0.022MF	5%	50V
C620	1-126-964-11	ELECT	10MF	20%	50V		C905	1-126-964-11	ELECT	10MF	20%	50V
C639	1-126-964-11	ELECT	10MF	20%	50V		C906	1-136-166-00	FILM	0.12MF	5%	50V
C652	1-136-171-00	FILM	0.33MF	5%	50V		C907	1-124-903-11	ELECT	1MF	20%	50V
C653	1-104-661-91	ELECT	330MF	20%	16V		C908	1-124-903-11	ELECT	1MF	20%	50V
C654	1-104-664-11	ELECT	47MF	20%	25V		C909	1-136-153-00	FILM	0.01MF	5%	50V
C656	1-126-967-11	ELECT	47MF	20%	16V		C1628	1-136-244-11	FILM	0.1MF	5%	50V
C657	1-136-165-00	FILM	0.1MF	5%	50V		C2701	1-126-964-11	ELECT	10MF	20%	50V
C658	1-136-165-00	FILM	0.1MF	5%	50V		C2702	1-104-664-11	ELECT	47MF	20%	25V
C659	1-136-165-00	FILM	0.1MF	5%	50V		C2706	1-102-820-00	CERAMIC	330PF	5%	50V
C660	1-136-164-00	FILM	0.082MF	5%	50V							

**D**

The components identified by shading and marked **▲** are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK				
<b>&lt; CONNECTOR &gt;</b>											
CN0001	*1-564-520-11	PLUG, CONNECTOR 5P		F601	▲ 1-532-505-41	FUSE 2.5A 250V					
CN0002	*1-568-878-51	PIN, CONNECTOR 3P			▲*1-533-725-11	HOLDER, FUSE ; F601					
CN0004	1-568-878-51	PIN, CONNECTOR 3P		<b>&lt; FUSE &gt;</b>							
CN0005	1-695-915-11	TAB (CONTACT)		<b>&lt; IC &gt;</b>							
CN0101	*1-573-296-21	CONNECTOR, BOARD TO BOARD 10P		IC236	8-759-190-89	IC TDA7265					
CN0102	1-695-297-11	CONNECTOR, BOARD TO BOARD 20P			4-202-373-01	SPRING, IC ; IC236					
CN0521	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P			4-202-710-01	SPACER, INSULATING ; IC236					
CN0722	▲*1-580-844-11	PIN, CONNECTOR (POWER)		IC260	8-759-330-93	IC TDA7309					
CN0723	▲*1-695-292-11	PIN, CONNECTOR (POWER)		IC261	8-759-502-21	IC TDA2822M					
CN0743	*1-564-596-11	PLUG, CONNECTOR 15P		IC603	8-759-095-34	IC LM2940T-8.0					
CN0745	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P			4-382-854-11	SCREW (M3X10), P, SW (+) ; IC603					
CN0746	*1-568-879-11	PIN, CONNECTOR 4P		IC604	8-759-513-71	IC PQ05RF21					
CN3133	1-568-882-51	PIN, CONNECTOR 7P			4-202-373-01	SPRING, IC ; IC604					
DY1	*1-580-798-11	CONNECTOR PIN (DY) 6P		IC606	8-759-991-43	IC LM78L12ACZ					
<b>&lt; DIODE &gt;</b>											
D101	8-719-982-27	DIODE MTZJ-33C		IC607	8-759-513-71	IC PQ05RF21					
D236	8-719-911-19	DIODE ISS119-25			4-202-373-01	SPRING, IC ; IC607					
D237	8-719-911-19	DIODE ISS119-25		IC801	8-759-103-93	IC UPC393C					
D238	8-719-911-19	DIODE ISS119-25		IC802	8-759-192-71	IC STV9379					
D239	8-719-911-19	DIODE ISS119-25			4-202-373-01	SPRING, IC ; IC802					
D262	8-719-911-19	DIODE ISS119-25		IC900	8-742-014-00	RECEIVER HIC SBX1981-51					
D264	8-719-911-19	DIODE ISS119-25		IC901	8-749-012-12	IC IS474					
D276	8-719-911-19	DIODE ISS119-25		IC2701	8-759-603-37	IC M5216P					
D278	8-719-911-19	DIODE ISS119-25		<b>&lt; JACK &gt;</b>							
D279	8-719-911-19	DIODE ISS119-25		J900	1-764-606-11	JACK					
D280	8-719-911-19	DIODE ISS119-25		J901	1-568-678-11	TERMINAL BLOCK, S 3P					
D281	8-719-911-19	DIODE ISS119-25		<b>&lt; COIL &gt;</b>							
D282	8-719-911-19	DIODE ISS119-25		L602	1-412-525-31	INDUCTOR 10UH					
D612	8-719-911-19	DIODE ISS119-25		L603	1-412-525-31	INDUCTOR 10UH					
D613	8-719-911-19	DIODE ISS119-25		L802	1-459-123-00	COIL,DUST CORE (PAC)					
D631	8-719-911-19	DIODE ISS119-25		L803	1-459-123-00	COIL,DUST CORE (PAC)					
D632	8-719-911-19	DIODE ISS119-25		L806	1-459-592-11	COIL (WITH CORE) (PMC)					
D633	8-719-911-19	DIODE ISS119-25		L807	1-412-524-11	INDUCTOR 8.2UH					
D802	8-719-979-99	DIODE ERD08M-15		L811	1-459-104-00	COIL, WITH CORE 10MH					
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D802		L814	1-422-613-11	COIL, AIR CORE					
D803	8-719-043-14	DIODE ESAD39M-06C		L815	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH					
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D803		L816	1-408-947-00	INDUCTOR 2.2MMH					
D804	8-719-971-20	DIODE ERC38-06		L900	1-408-409-00	INDUCTOR 10UH					
D805	8-719-908-03	DIODE GP08D		L901	1-408-409-00	INDUCTOR 10UH					
D806	8-719-908-03	DIODE GP08D		<b>&lt; TRANSISTOR &gt;</b>							
D810	8-719-979-85	DIODE EGP20G		Q276	8-729-030-03	TRANSISTOR DTC144ESA-TP					
D811	8-719-302-43	DIODE EL11Z		Q277	8-729-119-76	TRANSISTOR 2SA1175-HFE					
D812	8-719-510-26	DIODE DLNL20		Q278	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D813	8-719-510-26	DIODE DLNL20		Q279	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D814	8-719-908-03	DIODE GP08D		Q280	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D815	8-719-110-13	DIODE RD9.1ESB2		Q281	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D816	8-719-110-41	DIODE RD15ES-B2		Q282	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D817	8-719-911-19	DIODE ISS119-25		Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D818	8-719-911-19	DIODE ISS119-25		Q607	8-729-029-56	TRANSISTOR DTA144ESA					
D819	8-719-911-19	DIODE ISS119-25		Q613	8-729-030-03	TRANSISTOR DTC144ESA-TP					
D873	8-719-911-19	DIODE ISS119-25		Q614	8-729-029-56	TRANSISTOR DTA144ESA					
D874	8-719-911-19	DIODE ISS119-25		Q616	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D901	8-719-030-11	DIODE SLA-570KT3F		Q617	8-729-029-67	TRANSISTOR DTC144ESA-TP					
	*4-203-258-01	HOLDER, LED ; D901		Q618	8-729-119-76	TRANSISTOR 2SC1175-HFE					
D2701	8-719-911-19	DIODE ISS119-25		Q620	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D2702	8-719-911-19	DIODE ISS119-25		Q624	8-729-119-78	TRANSISTOR 2SC2785-HFE					

D

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q801	8-729-119-80	TRANSISTOR 2SC2688-LK		R631	1-215-477-00	METAL	220K 1% 1/4W
Q802	8-729-821-07	TRANSISTOR 2SC3997CA		R632	1-249-416-11	CARBON	820 5% 1/4W
4-200-399-01	SPACER, IC ; Q802			R633	1-249-429-11	CARBON	10K 5% 1/4W
4-382-854-11	SCREW (M3X10), P, SW (+) ; Q802			R634	1-247-895-91	CARBON	470K 5% 1/4W
Q803	8-729-039-68	TRANSISTOR IRF620		R635	1-215-926-00	METAL OXIDE	33K 5% 3W F
4-202-373-01	SPRING, IC ; Q803			R638	1-249-425-11	CARBON	4.7K 5% 1/4W
Q804	8-729-039-68	TRANSISTOR IRF620		R644	1-249-425-11	CARBON	4.7K 5% 1/4W
Q2701	8-729-119-78	TRANSISTOR 2SC2785-HFE		R645	1-249-410-11	CARBON	270 5% 1/4W
< RESISTOR >				R647	1-249-420-11	CARBON	1.8K 5% 1/4W
L902	1-249-417-11	CARBON	1K 5% 1/4W	R665	1-249-425-11	CARBON	4.7K 5% 1/4W
L903	1-249-417-11	CARBON	1K 5% 1/4W	R666	1-249-413-11	CARBON	470 5% 1/4W
R236	1-249-424-11	CARBON	3.9K 5% 1/4W	R676	1-249-437-11	CARBON	47K 5% 1/4W
R237	1-249-417-11	CARBON	1K 5% 1/4W	R677	1-249-437-11	CARBON	2.2K 5% 1/4W
R239	1-249-424-11	CARBON	3.9K 5% 1/4W	R678	1-249-421-11	CARBON	330 5% 1/4W
R240	1-249-417-11	CARBON	1K 5% 1/4W	R802	1-215-916-00	METAL OXIDE	680 5% 3W F
R244	1-249-413-11	CARBON	470 5% 1/4W	R803	1-215-916-00	METAL OXIDE	680 5% 3W F
R245	1-249-430-11	CARBON	12K 5% 1/4W	R804	1-215-916-00	METAL OXIDE	680 5% 3W F
R246	1-249-430-11	CARBON	12K 5% 1/4W	R805	1-216-487-11	METAL OXIDE	12K 5% 3W F
R247	1-249-413-11	CARBON	470 5% 1/4W	R806	1-249-411-11	CARBON	330 5% 1/4W
R248	1-249-425-11	CARBON	4.7K 5% 1/4W	R807	1-247-843-11	CARBON	3.3K 5% 1/4W
R249	1-216-357-00	METAL OXIDE	4.7 5% 1W F	R808	1-216-384-11	METAL OXIDE	0.39 5% 3W
R250	1-216-357-00	METAL OXIDE	4.7 5% 1W F	R809	1-215-880-00	METAL OXIDE	10 5% 2W F
R251	1-249-429-11	CARBON	10K 5% 1/4W	R810	1-215-914-11	METAL OXIDE	330 5% 3W F
R252	1-249-429-11	CARBON	10K 5% 1/4W	R811	1-216-434-11	METAL OXIDE	1.8K 5% 1W F
R260	1-247-863-91	CARBON	22K 5% 1/4W	R817	1-202-972-61	FUSIBLE	1 5% 1/4W F
R261	1-247-863-91	CARBON	22K 5% 1/4W	R818	1-249-377-11	CARBON	0.47 5% 1/4W F
R262	1-249-421-11	CARBON	2.2K 5% 1/4W	R819	1-249-377-11	CARBON	0.47 5% 1/4W F
R263	1-249-421-11	CARBON	2.2K 5% 1/4W	R820	1-214-907-00	METAL	56K 1% 1/2W
R264	1-212-857-00	FUSIBLE	10 5% 1/4W F	R821	1-249-420-11	CARBON	1.8K 5% 1/4W
R265	1-249-389-11	CARBON	4.7 5% 1/4W F	R823	1-249-420-11	CARBON	1.8K 5% 1/4W
R266	1-249-389-11	CARBON	4.7 5% 1/4W F	R835	1-249-432-11	CARBON	18K 5% 1/4W
R267	1-247-815-91	CARBON	220 5% 1/4W	R837	1-249-422-11	CARBON	2.7K 5% 1/4W
R268	1-247-815-91	CARBON	220 5% 1/4W	R843	1-202-822-00	SOLID	2.2K 20% 1/2W
R269	1-249-415-11	CARBON	680 5% 1/4W	R844	1-249-424-11	CARBON	3.9K 5% 1/4W
R270	1-249-415-11	CARBON	680 5% 1/4W	R845	1-247-881-00	CARBON	120K 5% 1/4W
R271	1-247-742-11	CARBON	180 5% 1/2W F	R846	1-249-422-11	CARBON	2.7K 5% 1/4W
R277	1-249-419-11	CARBON	1.5K 5% 1/4W	R847	1-249-437-11	CARBON	47K 5% 1/4W
R278	1-249-441-11	CARBON	100K 5% 1/4W	R848	1-249-425-11	CARBON	4.7K 5% 1/4W
R279	1-249-429-11	CARBON	10K 5% 1/4W	R849	1-249-429-11	CARBON	10K 5% 1/4W
R280	1-249-425-11	CARBON	4.7K 5% 1/4W	R850	1-249-389-11	CARBON	4.7 5% 1/4W F
R281	1-249-437-11	CARBON	47K 5% 1/4W	R851	1-216-394-00	METAL OXIDE	2.7 5% 3W F
R282	1-249-430-11	CARBON	12K 5% 1/4W	R854	1-249-436-11	CARBON	39K 5% 1/4W
R283	1-249-429-11	CARBON	10K 5% 1/4W	R855	1-249-417-11	CARBON	1K 5% 1/4W
R284	1-249-432-11	CARBON	18K 5% 1/4W	R857	1-202-822-00	SOLID	2.2K 20% 1/2W
R285	1-249-425-11	CARBON	4.7K 5% 1/4W	R859	1-249-432-11	CARBON	18K 5% 1/4W
R286	1-249-421-11	CARBON	2.2K 5% 1/4W	R860	1-247-843-11	CARBON	3.3K 5% 1/4W
R287	1-249-412-11	CARBON	390 5% 1/4W	R861	1-249-417-11	CARBON	1K 5% 1/4W
R288	1-249-421-11	CARBON	2.2K 5% 1/4W	R862	1-249-383-11	CARBON	1.5 5% 1/4W F
R289	1-249-421-11	CARBON	2.2K 5% 1/4W	R863	1-216-475-11	METAL OXIDE	120 5% 3W F
R290	1-247-807-31	CARBON	100 5% 1/4W	R865	1-249-436-11	CARBON	39K 5% 1/4W
R291	1-249-421-11	CARBON	2.2K 5% 1/4W	R866	1-249-432-11	CARBON	18K 5% 1/4W
R292	1-249-429-11	CARBON	10K 5% 1/4W	R867	1-216-389-11	METAL OXIDE	1 5% 3W F
R293	1-249-429-11	CARBON	10K 5% 1/4W	R868	1-249-418-11	CARBON	1.2K 5% 1/4W
R294	1-249-429-11	CARBON	10K 5% 1/4W	R895	1-215-866-11	METAL OXIDE	330 5% 1W F
R295	1-247-885-00	CARBON	180K 5% 1/4W	R900	1-247-815-91	CARBON	220 5% 1/4W
R296	1-247-885-00	CARBON	180K 5% 1/4W	R908	1-249-401-11	CARBON	47 5% 1/4W
R297	1-247-807-31	CARBON	100 5% 1/4W	R909	1-249-437-11	CARBON	47K 5% 1/4W
R298	1-247-807-31	CARBON	100 5% 1/4W	R910	1-249-437-11	CARBON	47K 5% 1/4W
R630	1-249-429-11	CARBON	10K 5% 1/4W	R911	1-249-425-11	CARBON	4.7K 5% 1/4W

**D VM**

The components identified by shading and marked  are critical for safety.  
Replace only with the part number specified.

**Les composants identifiés par une trame et une marque  sont critiques pour la sécurité.**  
**Ne les remplacer que par une pièce portant le numéro spécifique.**



The components identified by shading and marked **▲** are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK
R1727	1-249-402-11	CARBON	56	5%	1/4W	F			MISCELLANEOUS
R1729	1-216-166-00	METAL GLAZE	47	5%	1/8W				*****
R1730	1-216-121-91	METAL GLAZE	1M	5%	1/10W		▲ 1-406-806-11	COIL, DEGAUSSING	
R1731	1-216-049-91	METAL GLAZE	1K	5%	1/10W		1-452-032-00	MAGNET, DISK; 10MM Ø	
R1735	1-216-049-91	METAL GLAZE	1K	5%	1/10W		1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
R1736	1-247-807-31	CARBON	100	5%	1/4W		▲ 1-453-222-11	TRANSFORMER ASSY, FLYBACK	(NX-4003/U2B4)
R1737	1-216-075-00	METAL GLAZE	12K	5%	1/10W				
R1738	1-216-174-00	METAL GLAZE	100	5%	1/8W		1-504-146-11	SPEAKER (5X11CM)	
R1739	1-216-222-00	METAL GLAZE	10K	5%	1/8W		▲ 1-251-317-31	CAP ASSY, HIGH-VOLTAGE	
R1740	1-216-174-00	METAL GLAZE	100	5%	1/8W		▲ 1-571-433-21	SWITCH, PUSH (AC POWER)	
R1741	1-216-166-00	METAL GLAZE	47	5%	1/8W		1-693-338-11	TUNER (TUVIF) (AEP)	(KV-25C3A/25C3D/25C3E)
R1743	1-216-021-00	METAL GLAZE	68	5%	1/10W		1-693-340-11	TUNER (TUVIF) (FR) (KV-25C3B)	
R1744	1-216-150-91	METAL GLAZE	10	5%	1/8W		▲ 1-751-680-11	CORD, POWER (WITH NOISE FILTER)	
R1745	1-216-150-91	METAL GLAZE	10	5%	1/8W		2.5A/250V		
*****									
V901	8-733-243-05	PICTURE TUBE (SD-257) (M60LCS60X)					▲ 8-451-474-11	DEFLECTION YOKE (Y25GXCB)	
	8-453-005-11	NECK ASSY, (NA297-M)					▲ 8-453-005-11	NECK ASSY, (NA297-M)	
	8-733-243-05	PICTURE TUBE (SD-257) (M60LCS60X)							
*****									
ACCESSORIES AND PACKING MATERIALS									
	1-769-175-11	CABLE, ANTENNA (WITH FILTER)					1-403-905-02	BAG, PROTECTION	
	*4-039-492-01	CUSHION (UPPER) (ASSY)					*4-203-493-11	CUSHION (LOWER) (ASSY)	
	*4-203-494-01	INDIVIDUAL CARTON					4-203-639-41	MANUAL, INSTRUCTION (KV-25C3A) (ITALIAN)	
	4-203-639-51	MANUAL, INSTRUCTION (KV-25C3B) (FRENCH/GERMAN/ITALIAN/DUTCH)					4-203-639-11	MANUAL, INSTRUCTION (KV-25C3D) (GERMAN/ENGLISH/DUTCH)	
	4-203-639-71	MANUAL, INSTRUCTION (KV-25C3E) (SPANISH)					4-203-639-81	MANUAL, INSTRUCTION (KV-25C3E) (PORTUGUESE/DANISH/SWEDISH/NORWEGIAN/ FINNISH)	
*****									
REMOTE COMMANDER									
	1-473-692-11	COMMANDER, STANDARD TYPE (RM-862)							
*****									

**KV-25C3**

**9-974-949-01**

**Sony Corporation  
Consumer A & V Products Company  
TV & Display Products Div.**

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